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STATISTICAL REVIEW
OF
ENGLAND AND WALES,
FOR THE YEAR
1926.

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TEXT.



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- Table 4.** (*Page 19.*)—Deaths. Cause 154, year 1926. Females: For 44 *read* 445.
- Table 14.** (*Page 62.*)—Death-rate. England and Wales. For 11·7 *read* 11·6.
Natural Increase. England and Wales. For 6·1 *read* 6·2.
- Table 17.** (*Page 136.*)—Deaths. All ages. Cause 60(b)(3), Males: For 39 *read* 35.
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- Table E.** (*Page 7.*)—Death-rate. England and Wales. For 11·7 *read* 11·6.
Natural Increase. England and Wales. For 6·1 *read* 6·2.
- Table Y.** (*Page 117.*)—Ceylon. Population. For 498,605 *read* 4,498,605.

STATISTICAL REVIEW, 1926.

Note—Of the tables referred to below, those numbered in Arabic will be found in "Tables, Part I—Medical," and those lettered in "Tables, Part II—Civil," while those numbered in Roman numerals appear in the text of this volume.

DEATHS.

The deaths of 453,804 persons were registered in England and Wales during 1926, 231,549 of these being males and 222,255 females. Except in 1923, this is the smallest number registered since 1862, when the population was only 52 per cent. of that estimated for 1926.

Deaths of civilians, including all deaths of females and 99·81 per cent. of those of males, are referred in tabulation to their administrative area of residence, and therefore figure in all tables relating to portions of the country. It has been found, however, that similar treatment cannot be satisfactorily applied to the deaths of non-civilians, which are therefore excluded from all tables relating to local areas. Table 17, accordingly, so far as it refers to England and Wales as a whole, includes all deaths registered, but when referring to the population as subdivided by class of area, includes only deaths of civilians; and the same restriction to civilian mortality only applies to all tables embodying distinction of local area.

The 453,804 deaths correspond to a rate of 11·6 per 1,000 of the estimated population. When standardized* to correct for the deviation of the sex and age distribution of the population, as shown in Table LXXII, from that of the standard population of 1901, this death-rate is reduced to 10·1.

As the population of this country in 1901 included relatively few infants and old people it forms a standard exceptionally favourable to low mortality. Its use for this purpose accordingly yields comparatively low standardized rates all round. In order to correct any wrong impression which might arise from this fact, and to provide standardized rates for this country comparable with those of countries using the standard recommended by the International Statistical Institute (a composite population made up of those of a large number of European countries in 1900 or 1901), rates calculated upon the latter by the method suggested by the Institute on page viii of the "Annuaire international de statistique, II. Mouvement de la population (Europe)," are shown in Table XV, as well as those based on the 1901 English standard, which is that always used elsewhere in this Review. It will be seen that use of the less favourable standard increased the rate from 10·1 to 11·3 per thousand.

* The term "standardized death-rate" means the death-rate corrected for differences of sex and age constitution of the population. For a description of the direct method employed for this "standardization" see the Annual Report for 1911 (pages xxvii-xxxi). Standardized death-rates for the sexes separately quoted in this Review are based upon the age distribution of persons of undistinguished sex in the general population of England and Wales in 1901. (See Annual Report for 1913, page xx.)

The standardized rate of 10·1 is the lowest hitherto recorded, the nearest approach to it being 10·3 in 1923. This applies to each sex.

Table 2 shows that this favourable result has been attained by maintenance of low mortality throughout the whole year rather than by an outstandingly low record for any part of it. No quarter of the year provided a rate lower than all of its predecessors, and only that for the third was as low as in any previous year.

Mortality of each sex.—Table 1 shows that, like the (standardized) total mortality, the rate for each sex in 1926 was the lowest yet attained.

This applies only to the standardized rates, crude rates for both sexes being the same in 1926 as in 1923. But the ageing of the population, which is going on so rapidly at the present time as a result of the fall in both birth-rate and death-rate, would have had the effect, if mortality had remained unchanged since 1923, of increasing the crude death-rate, and it is allowance for this factor which reduces the standardized rates for males and females alike below those for 1923, hitherto for each sex the year of lowest mortality, crude and standardized alike.

It may be noted that this is the fourth year in succession in which the standardized rate for females has been less than 10 per 1,000 living. This must not be taken as implying that if such rates were maintained the average lifetime of females would be rather over 100 years, for their maintenance would imply rapid change of age distribution in a direction unfavourable to low mortality—a process at present in active operation. The picture of vitality suggested by the figures quoted may be corrected by means of the recently published English life table No. 9 (Decennial Supplement, 1921, Part I.), which shows that at the rates of mortality prevalent in 1920-22 the average lifetime of females in our population would have been 59·58 years. This average would rise to over 60 at the rates for 1926, but even so a large difference is left between this figure and that suggested by a death-rate of 9-10 per 1,000. The character of the standard 1901 population accounts for much less than half of this difference, for the crude death-rate of about 11·6 for females in 1920-22 would imply an average lifetime of about 86 years if it could be maintained indefinitely. The explanation of course is that unless increase of population at something like its former rate is restored the crude death-rate must rise in the absence of sensational and unexpected further decrease of mortality. The population of 1921 still retained the impress of a prolonged period of rapid increase in the shape of disproportionate numbers at the earlier ages, with their lower death-rates, and but for this the death-rates under discussion would be quite impossible with mortality as hitherto experienced. As the aged gradually come to represent the survivors of births to a population commensurate in size with

that amongst which they are found their relative numbers will increase, and the crude death-rate must tend to rise accordingly. But this will not affect the standardized rate, the true measure of mortality. For the age distribution of the population of 1901 cannot change, and as long as this remains the standard the standardized rate will continue to fall in proportion and so long as mortality on the whole declines. With increase of the crude and decrease of the standardized rate, rapidly increasing divergence between the two in the near future may be anticipated, if present tendencies are maintained. This divergence has been increasing throughout the present century, but present indications are that the rate of increase will be accelerated. Hitherto reduction of mortality has been so great that the crude rate has continued to fall in a remarkable manner, notwithstanding ageing of the population, its fall only slowly lagging behind that in the standardized rate, but the position even ten years hence will probably be very different.

The standardized mortality of males regularly exceeds that of females. Up to 1860 or so the excess was only about 9 per cent., but for the 15 years ending with 1914 it averaged about 20 per cent.

Table I.—England and Wales: Mortality of Males of Various Ages per cent. of that of Females of Like Age, 1911–14 and 1926.

(See Table XV.)

—	All Ages (standard- ized).	0—	5—	10—	15—	20—	25—	35—	45—	55—	65—	75—	85 and upwards
1911–14	121	120	102	96	110	116	121	125	130	132	125	121	113
1926 ..	123	124	111	104	104	105	111	131	135	134	130	123	111

During the war this excess increased to a maximum of 37 per cent. in 1917, as a consequence of deterioration, by selective recruiting, of the male element in the civilian population, to which the mortalities compared necessarily referred during the war period, but Table I shows that the male excess for total mortality is now little more than before the war. The relative position of males has improved considerably at ages 15–35 (which include those most affected by war service) and deteriorated in childhood and in later life.

Infant Mortality.

Of the 453,804 deaths registered during the year, 48,757, or 10·7 per cent., were those of infants under one year of age. This proportion has fallen greatly of late years, owing mainly to reduction of the birth-rate. So recently as 1901–10 it was 22·6 per cent.

The rate of infant mortality resulting from these deaths is 70 per 1,000 births, the lowest yet recorded in this country, with one exception, 69 in 1923.

It has been pointed out in previous Reviews that for the years 1915–22 the conventional statement of infant mortality (deaths under one year of age registered in the year per thousand

births registered in the same year) was an unreliable measure of the extent of infantile mortality, owing to violent fluctuations in the birth-rate during, or immediately preceding, those years. In the Report for 1920 a method was described for obtaining a more exact statement of infant mortality by stating the deaths in proportion, not to the births registered in the same year but to all the infants born during the same three monthly periods as those which died. The results of this correction are applied in Table II (rates in brackets), where it may be seen that since the period of violent fluctuations of the birth-rate came to an end the effect of this revision of the crude rate has been much less. As in two of the preceding three years, 1923 and 1925, this correction was without effect, it has now been discontinued; but it is still necessary to retain the restated rates for earlier years in the table in order to secure any accuracy in statement of the recent history of infant mortality.

Table II.—England and Wales : Infant Mortality, distinguishing Mortality from Diarrhoeal Diseases, 1861–1926.

Deaths under 1 year of age per 1,000 Births.

	Diarrhoeal Diseases.	Other Causes.	All Causes.		Diarrhoeal Diseases.	Other Causes.	All Causes.		Diarrhoeal Diseases.	Other Causes.	All Causes.
1861–65	15	136	151	1911	36 (36)	94 (93)	130 (129)	1923	7 (7)	62 (62)	69 (69)
1866–70	20	137	157	1912	8 (8)	87 (87)	95 (95)	1924	6 (6)	69 (68)	75 (74)
1871–75	19	134	153	1913	19 (19)	89 (90)	108 (109)	1925	7 (7)	68 (68)	75 (75)
1876–80	16	129	145	1914	17 (17)	88 (87)	105 (104)	1926	8	62	70
1881–85	14	125	139	1915	15 (15)	95 (91)	110 (106)				
1886–90	17	128	145	1916	11 (10)	80 (81)	91 (91)				
1891–95	20	131	151	1917	10 (9)	86 (82)	96 (91)				
1896–00	31	125	156	1918	10 (10)	87 (88)	97 (98)				
1901–05	23	115	138	1919	9 (9)	80 (84)	89 (93)				
1906–10	18	99	117	1920	8 (9)	72 (76)	80 (85)				
1911–15	19 (19)	91 (90)	110 (109)	1921	14 (14)	69 (67)	83 (81)				
1916–20	9 (9)	81 (82)	90 (91)	1922	6 (5)	71 (70)	77 (75)				
1921–25	8 (8)	68 (67)	76 (75)								

Two very remarkable features of Table II are (1) the extent of the fall which has occurred, and (2) its confinement to the present century. Dealing with the quinquennial rates, it will be seen that from 1861–65 till the end of the century infant mortality did not fall at all, some reduction from other causes being more than balanced by high diarrhoeal mortality in 1896–1900. Since then, however, steadily progressive decline (interrupted to some extent for diarrhoea by the hot summer of 1911) has reduced the total rate to less than half, and that from diarrhoea to about a quarter, of its level at the end of the century.

The rate of fall has been very different at different periods of the first year of life, as shown by Table III and by Diagram 1 prepared from it. This table records the mortality per 1,000 births at each of eleven subdivisions of the first year of life in each year from 1906 onwards, the rates for the years 1911–25 being corrected in the manner above referred to. It shows that infant mortality has never been lower than in 1926, except in 1923, when the rate, equal to that of 1926 for the first four weeks of life, was somewhat lower at each later period distinguished. With

this exception, however, the rates for 1926 are the lowest yet attained at each age, and for the first day and the fourth week of life they are the lowest without exception.

Diagram 1. England and Wales.—Infant Mortality 1906-10—1926.
Rates in different Periods of Infancy at later dates per 1000 of
those for 1906-10.

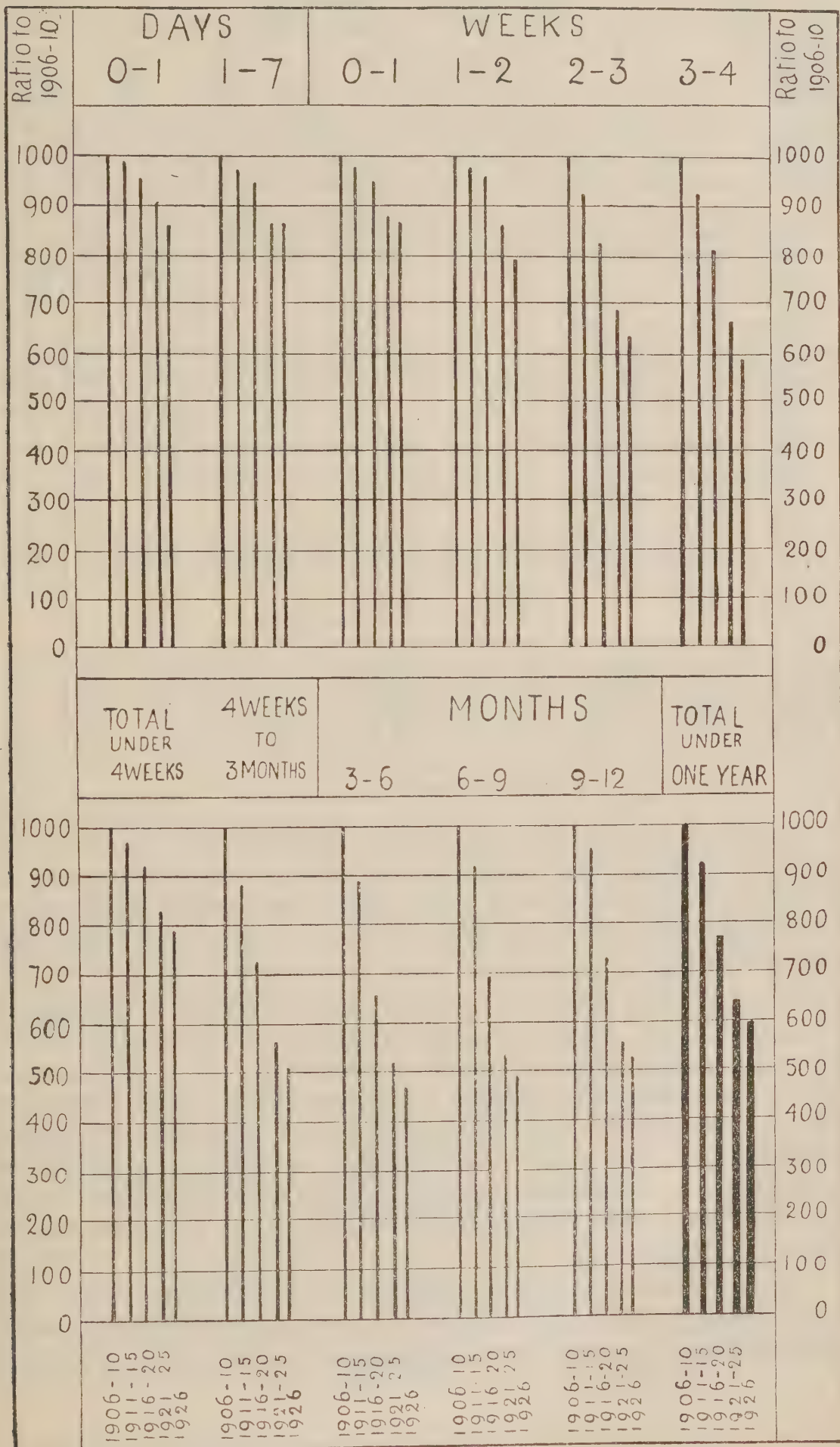


Table III.—England and Wales: Age Distribution of Infant Mortality, 1881-1926.

	Days.		Weeks.				Months.					Total under one year.
	0-1	1-7	0-1	1-2	2-3	3-4	Total under four weeks	Four Weeks to three M'nths	3-6	6-9	9-12	
1881-1885	—	—	—	—	—	—	67	28	44			139
1886-1890	—	—	—	—	—	—	69	30	46			145
1891-1895	—	—	—	—	—	—	74	31	46			151
1896-1900	—	—	—	—	—	—	74	34	48			156
1901-1905	—	—	—	—	—	—	70	28	40			138
1906-1910	11.5	13.0	24.5	5.8	5.7	4.2	40.2	22.8	22.0	17.3	14.8	117.1
1911-1915*	11.4	12.7	24.1	5.7	5.3	3.9	39.0	20.2	19.6	15.9	14.1	108.7
1916-1920*	11.0	12.4	23.4	5.6	4.7	3.4	37.0	16.5	14.6	12.0	10.8	90.9
1921-1925*	10.4	11.3	21.7	5.0	3.9	2.8	33.4	12.8	11.3	9.2	8.3	74.9
1906	11.8	13.2	25.0	6.1	6.2	4.6	41.9	25.7	27.0	20.7	17.2	132.5
1907	11.3	13.1	24.4	6.0	5.9	4.5	40.7	23.3	21.3	17.3	15.1	117.6
1908	11.5	12.8	24.3	5.9	5.8	4.3	40.3	24.2	23.6	17.7	14.6	120.4
1909	11.6	13.2	24.7	5.7	5.3	4.0	39.8	20.4	19.2	15.6	13.8	108.7
1910	11.5	12.5	24.1	5.4	5.1	3.8	38.5	20.0	18.8	15.0	13.2	105.4
1911*	11.6	12.7	24.3	6.0	6.0	4.5	40.6	24.7	25.9	20.6	17.4	129.2
1912*	11.3	12.9	24.2	5.6	5.0	3.7	38.4	17.7	14.9	12.5	11.4	94.7
1913*	11.8	12.7	24.5	5.8	5.4	3.9	39.5	20.3	19.8	15.7	13.6	108.9
1914*	11.4	12.7	24.1	5.5	5.0	3.9	38.5	19.3	18.7	15.0	13.0	104.4
1915*	10.9	12.5	23.4	5.7	5.0	3.7	37.7	18.6	18.2	16.0	15.2	105.8
1916*	10.9	12.3	23.2	5.6	4.9	3.4	36.9	16.9	15.2	11.7	10.3	91.1
1917*	11.0	12.4	23.4	5.6	4.8	3.4	37.1	16.9	15.0	11.6	10.6	91.1
1918*	11.1	12.1	23.2	5.5	4.6	3.4	36.6	17.1	16.1	14.4	13.7	97.9
1919*	12.2	13.7	25.9	6.1	4.9	3.6	40.4	16.4	14.4	11.8	10.3	93.2
1920*	10.4	11.5	21.9	5.3	4.6	3.3	35.0	15.5	13.0	11.0	10.0	84.5
1921*	10.8	11.6	22.4	5.4	4.5	3.0	35.2	14.7	13.7	9.7	7.8	81.2
1922*	10.4	11.6	22.0	5.2	4.1	2.8	33.9	12.4	10.6	9.2	8.6	74.7
1923*	10.2	10.9	21.1	4.6	3.6	2.6	31.9	11.4	10.0	8.3	7.6	69.2
1924*	10.6	11.2	21.8	4.8	3.8	2.6	33.0	12.4	10.8	9.3	8.8	74.2
1925*	10.1	11.1	21.2	4.7	3.7	2.7	32.3	12.5	11.2	9.4	9.0	74.5
1926	10.0	11.3	21.3	4.6	3.6	2.5	31.9	11.6	10.4	8.6	7.7	70.2

Rates per 1,000 of those for 1906-10.

1906-1910	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1911-1915	991	977	984	983	930	929	970	886	891	919	953	928
1916-1920	957	954	955	966	825	810	920	724	664	694	730	776
1921-1925	904	869	886	862	684	667	831	561	514	532	561	640
1926	870	869	869	793	632	595	794	509	473	497	520	599

* Corrected rates—see page 4.

Immediately after the war, from 1919 to 1923, the rate for each age fell rapidly, but the fall could not be expected to continue at the pace then recorded, and maintenance during the three succeeding years of the ground then gained cannot be regarded as unsatisfactory.

Reduction has been much more rapid after than during the first month of life, each of the higher ages recording a fall of about 50 per cent. since 1906-10, but the first month only of 21 per cent. This accords with the general experience that infant mortality is much more variable and preventable after than during the first four weeks of life, when many infants evidently non-viable at birth must be expected to perish. It is during the first week especially that this comparative uniformity is in evidence, as shown by Diagram 1.

The diagram shows that the fall since 1906-10, slight but steady during the first week of life, rapidly increases with advancing age to a maximum at 3-6 months (the period of highest

mortality from diarrhoea), after which the reduction becomes slightly less up to the end of the first year. The diagram also brings out the fact that in the first month, and especially the first two weeks, of life the rate of progress has been increasing of late years, but that after the fourth week the position is reversed, a line joining the tops of the columns tending towards concavity (after 1911–15) instead of convexity, as during the first four weeks. Probably this experience is only what was to be expected in view of the more readily preventable nature of the later mortality. Progress was easier here, and after 1915 was made so rapidly that the pace has not been maintained during the last few years, though steady improvement continues. But the more difficult object of reducing mortality during the first four weeks is meeting with still increasing success as time goes on, and in 1926 the rate for the first day of life (9·99) fell for the first time below 10 per 1,000 births.

Distribution of Infant Mortality.—Table V shows how infant mortality was distributed in 1926 between the sexes and throughout the country.

The rates for the county boroughs and for the North are, as usual, in considerable excess, the highest rate in the table for

Table V.—Distribution of Infant Mortality, 1926.*

	Males.					Females.					Both Sexes.				
	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	72	—	72	—	—	56	—	56	—	—	64	—	64
County Boroughs ..	101	83	69	79	91	79	63	53	60	71	90	73	61	70	81
Other Urban Districts	89	69	59	82	75	69	52	45	63	58	79	61	53	72	67
Rural Districts ..	84	63	56	79	68	59	49	44	62	52	72	56	50	71	60
All Areas	95	72	66	80	79	73	55	51	62	61	84	64	58	71	70

* The "North" includes the administrative counties and county boroughs corresponding to the registration counties in the eighth, ninth, and tenth "registration divisions" of the Registrar-General, i.e., Lancashire, Cheshire, and Yorkshire, and counties north of them. The "South" includes England south of the Thames, with the whole of the County of London and the five south-western counties, forming the first, second, and fifth registration divisions. "Wales" corresponds to the eleventh or Welsh registration division and so includes Monmouthshire. All the rest of the country, corresponding to the third, fourth, sixth, and seventh registration divisions, is included in the Midland area. The counties in the four areas are as follows:—

North.	Midlands.	South.	Wales.	
Cheshire. Lancashire. Yorks, West Riding " East Riding. " North Riding. Durham.	Middlesex. Hertfordshire. Buckinghamshire. Oxfordshire. Northamptonshire. Soke of Peterborough. Huntingdonshire. Bedfordshire. Cambridgeshire. Isle of Ely. Essex. Suffolk, East. " West. Norfolk.	Gloucestershire. Herefordshire. Shropshire. Staffordshire. Worcestershire. Warwickshire. Leicestershire. Rutlandshire. Lincolnshire, Parts of Holland. " Kesteven. " Lindsey. Nottinghamshire. Derbyshire.	London. Surrey. Kent. Sussex, East. " West. Southampton. Isle of Wight Berkshire Wiltshire. Dorsetshire. Devonshire. Cornwall. Somersetshire.	Monmouthshire. Glamorganshire. Carmarthenshire. Pembrokeshire. Cardiganshire. Brecknockshire. Radnorshire. Montgomeryshire. Flintshire. Denbighshire. Merionethshire. Caernarvonshire. Anglesey.

infants of both sexes being 90 for the Northern county boroughs and the lowest 50 for the rural districts of the South. In each year from 1911 onwards the rate for the Northern county boroughs has been the highest in the table, and in each year except 1923 that for the rural districts of the South has been the lowest. For each class of area and for each sex mortality in 1926 decreased regularly from the North to the South of England.

The comparisons suggested by Table V are facilitated by Table VI, which states them, for infants of both sexes jointly, in percentage form. It shows that while, viewed in relation to the total for the country as a whole, excess of mortality is greatest in the county boroughs of the North, at 29 per cent., it is much decreased for these, and considerably increased for the smaller towns and rural districts of the North (excess for which then exceeds that for the county boroughs), when comparison is made only with similar areas. Viewed in the latter way the advantage of the South is greatest for its county boroughs and least for its rural districts. The constancy of the decline from the North to South of England remains, of course, unaffected.

**Table VI.—Proportionate Distribution of Infant Mortality, 1926.
(Both Sexes).**

	Mortality per cent. of that in England and Wales.					Mortality per cent. of that in England and Wales in the same class of Area.				
	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	92	—	92	—	—	—	—	—
County Boroughs	129	105	87	100	116	111	90	75	86	100
Other Urban Districts.. .. .	112	86	75	103	95	118	91	79	109	100
Rural Districts.. .. .	102	80	71	100	86	119	94	83	117	100
All Areas	120	91	83	102	100	—	—	—	—	—

Note.—These percentages are based on the rates in Table X.

The extent of the fall recorded during recent years for the population groups distinguished in Table VI is surprisingly uniform. As the record for these groups starts with 1911, the rates for the quinquennium 1911–15 have been used as the basis of comparison. From these rates those for 1926 show a substantial fall in every case, ranging from 30 per cent. for the rural districts of Wales to 42 per cent. for the county boroughs of Wales. Next to the latter come the urban districts of Wales and London, each with a fall of 41 per cent. The movements are detailed in Table VII.

Table VII.—Infant Mortality (both sexes) in the years 1911 to 1926 per cent. of that in 1911-15.

Year.	County Boroughs.					Urban Districts.				
	North.	Mid-lands.	South.	Wales.	England and Wales.	North.	Mid-lands.	South.	Wales.	England and Wales.
1911	116	123	124	112	119	120	123	127	120	122
1912	86	88	87	92	87	83	87	87	90	86
1913	100	101	99	99	100	102	96	94	100	98
1914	99	95	91	100	98	95	93	88	92	93
1915	100	96	99	94	98	98	102	104	98	100
1916	87	82	86	83	85	82	81	85	74	80
1917	88	83	91	81	86	84	89	93	76	86
1918	92	83	83	83	88	88	88	86	80	86
1919	82	74	79	78	80	83	80	81	76	80
1920	79	67	67	69	74	77	68	67	73	72
1921	77	70	74	70	74	78	74	75	75	76
1922	73	68	68	68	71	71	67	65	70	69
1923	69	59	56	62	65	66	60	57	61	62
1924	76	64	68	65	71	70	65	67	62	66
1925	73	66	62	71	70	70	64	63	68	67
1926	69	60	64	58	65	65	62	63	59	63

Year.	Rural Districts.					All Areas.					London.
	North.	Mid-lands.	South.	Wales.	England and Wales	North.	Mid-lands.	South.	Wales.	England and Wales.	
1911	116	116	118	114	116	118	121	121	116	118	119
1912	86	93	90	92	90	85	88	86	91	86	83
1913	103	96	95	101	98	101	98	97	101	98	97
1914	100	94	90	97	94	98	94	94	95	95	95
1915	96	101	107	95	100	99	100	104	97	100	103
1916	84	87	84	86	84	86	82	83	79	83	82
1917	86	94	97	85	91	86	87	95	79	87	95
1918	93	88	86	85	89	90	85	92	82	88	99
1919	88	93	88	86	89	83	80	80	79	81	78
1920	76	76	70	78	74	78	70	68	74	73	70
1921	82	76	74	78	78	78	74	75	75	75	74
1922	73	71	73	80	72	73	69	68	72	70	69
1923	68	69	67	70	68	68	62	58	64	63	56
1924	71	69	70	75	70	73	66	65	66	68	63
1925	71	73	70	72	71	72	67	63	71	68	62
1926	65	67	69	70	67	67	63	61	61	64	59

Table 11 compares classes of administrative areas in respect of infant mortality, with distinction of age, cause, and legitimacy. The total mortality in the urban areas as a whole exceeded that in the rural by 21 per cent. Table VIII shows that this excess was greater some few years ago than it has been latterly. As usual it increases with age.

A statement of infantile deaths and mortality for each administrative area in the country will be found in Table 14; while Table 13 supplements this information, for each metropolitan and county borough, and for the urban and rural portions of each administrative county, by distinctions of age and legitimacy.

Table VIII.—Infant Mortality in Urban Districts of all types per cent. of that in Rural Districts, 1911-26.

		Under 4 weeks.	4 weeks— 3 months.	3-6 Months.	6-9 Months.	9-12 Months.	Total under 1 year.
1911-1915	..	104	133	145	149	157	128
1916-1920	..	102	129	146	144	154	122
1921-1925	..	102	124	147	151	160	122
1921	.. ..	107	125	149	144	148	124
1922	.. ..	102	122	140	155	174	122
1923	.. ..	100	119	145	150	148	118
1924	.. ..	103	131	151	150	170	125
1925	.. ..	99	125	150	156	158	121
1926	.. ..	103	121	147	147	157	121

Mortality of Separate Weeks and Months of Age.—The tables appearing under this heading in earlier reports have been replaced by Tables IX and X, as it was felt that their place is adequately, and on the whole more usefully, filled by these tables. Very great detail of age is required in order to deal satisfactorily with the exceedingly high mortality of the earliest days and weeks of life ; but after the end of the first month the mass of detail and the instability involved by a monthly statement of mortality have been found to obscure rather than to illuminate the picture. Rates for two or three months have therefore been substituted as much less subject to chance variation arising from the smallness of their numerical basis and as providing a picture of the events recorded which while sufficiently detailed is better calculated, by reason of its greater compactness, to convey an intelligible idea of what is going on. Distinctions of sex and legitimacy are shown only for England and Wales as a whole, but are available for each of the populations dealt with. Some of the facts and rates applying to the illegitimate will be found in Table 13.

Table X, like its predecessors, shows that decrease of mortality from north to south of England is present in a considerable degree from the very first day of life, and is recorded with great regularity at all stages of infancy and for all classes of area. There is no exception to this rule of decline from north to south at any age in any class of area, but when all classes of area are grouped together high London mortality at 3-6 months raises the rate for the South above that for the Midlands at this age.

On the other hand the London rates for the first week and for the first four weeks of life are the lowest in the table (also at 1-7 days), a low rate in early infancy being a characteristic feature of the London returns, which is seen from Table 13 to apply also to "Greater London" in 1926, Metropolitan Borough

rates for the first four weeks of life ranging from 18 in Stepney to 41 in Holborn. Of the 82 county boroughs in England and Wales there were only 11 with a lower rate at this age than London's 25, Eastbourne's 12 being much the lowest (Table 13).

Increase of mortality with urbanization, on the other hand, is scarcely discernible at birth, but gradually increases as infancy advances from an excess for the county boroughs over the rural districts of 2 per cent. for the first day of life (which is more than wiped out by the low rate for London, the rural districts rate being in slight excess of the general average) to one of 85 per cent. at 9-12 months. This rule applies also to the North and Midlands considered separately, while in the South actual decrease with urbanization of mortality for the first day and for the first week is converted into substantial increase as age advances. In Wales the early advantage of the county boroughs is still greater than in the South of England, but applies in some degree even to 9-12 (though not to 3-9) months.

Table IX.—Deaths during various Portions of the first year of Life, 1926.

		Days.		Weeks.				Months.					Total under 1 Year.
		0-1	1-7	0-1	1-2	2-3	3-4	Total under 4 weeks.	4 weeks to 3 m'nths	3-6	6-9	9-12	
All Infants	M	3,993	4,505	8,498	1,782	1,408	1,026	12,714	4,806	4,205	3,393	2,918	28,036
	F	2,944	3,329	6,273	1,386	1,070	682	9,411	3,253	3,017	2,604	2,436	20,721
	P	6,937	7,834	14,771	3,168	2,478	1,708	22,125	8,059	7,222	5,997	5,354	48,757
Legitimate	M	3,571	4,218	7,789	1,652	1,302	929	11,672	4,396	3,846	3,154	2,744	25,812
	F	2,619	3,101	5,720	1,281	991	642	8,634	2,999	2,743	2,432	2,303	19,111
	P	6,190	7,319	13,509	2,933	2,293	1,571	20,306	7,395	6,589	5,586	5,047	44,923
Illegitimate	M	422	287	709	130	106	97	1,042	410	359	239	174	2,224
	F	325	228	553	105	79	40	777	254	274	172	133	1,610
	P	747	515	1,262	235	185	137	1,819	664	633	411	307	3,834
All Areas.	North ..	2,726	3,163	5,889	1,388	1,071	730	9,078	3,363	3,082	2,691	2,446	20,660
	Midlands	2,131	2,387	4,518	901	752	506	6,677	2,325	1,957	1,640	1,457	14,056
	South ..	1,549	1,611	3,160	613	440	363	4,576	1,753	1,614	1,215	1,126	10,284
	Wales ..	531	673	1,204	266	215	109	1,794	618	569	451	325	3,757
London	.. ..	696	668	1,364	285	194	161	2,004	846	917	671	629	5,067
County Boroughs	England & Wales	2,489	2,918	5,407	1,244	971	663	8,285	3,314	3,093	2,620	2,383	19,695
	North ..	1,473	1,676	3,149	742	570	389	4,850	2,001	1,901	1,648	1,516	11,916
	Midlands	731	874	1,605	356	305	204	2,470	930	842	701	642	5,585
	South ..	193	226	419	74	55	49	597	256	224	175	161	1,413
	Wales ..	92	142	234	72	41	21	368	127	126	96	64	781
Other Urban Districts	England & Wales	2,324	2,686	5,010	1,027	840	561	7,438	2,487	2,139	1,814	1,589	15,467
	North ..	868	1,052	1,920	443	346	242	2,951	992	849	765	686	6,243
	Midlands	829	916	1,745	329	273	177	2,524	819	706	581	533	5,163
	South ..	353	390	743	145	110	89	1,087	380	295	221	200	2,183
	Wales ..	274	328	602	110	111	53	876	296	289	247	170	1,878
Rural Districts	England & Wales	1,428	1,562	2,990	612	473	323	4,398	1,412	1,073	892	753	8,528
	North ..	385	435	820	203	155	99	1,277	370	332	278	244	2,501
	Midlands	571	597	1,168	216	174	125	1,683	576	409	358	282	3,308
	South ..	307	327	634	109	81	64	888	271	178	148	136	1,621
	Wales ..	165	203	368	84	63	35	550	195	154	108	91	1,098
England and Wales	First Qr.	1,735	2,173	3,908	926	799	517	6,150	2,513	2,201	2,047	1,974	14,885
	Second..	1,756	2,007	3,763	766	546	369	5,444	1,560	1,424	1,444	1,448	11,320
	Third ..	1,798	1,626	3,424	670	495	333	4,922	1,579	1,488	1,115	865	9,969
	Fourth..	1,648	2,028	3,676	806	638	489	5,609	2,407	2,109	1,391	1,067	12,583

Table X.—Infant Mortality at various Ages, 1926.

				Days.		Weeks.				Months.					Total under one year
				0-1	1-7	0-1	1-2	2-3	3-4	Total under 4 weeks	4 weeks to 3 months	3-6	6-9	9-12	
England and Wales.	All Infants ..	{	M	11.3	12.7	24.0	5.0	4.0	2.9	35.9	13.6	11.9	9.6	8.2	79
			F	8.7	9.8	18.4	4.1	3.1	2.0	27.7	9.6	8.9	7.7	7.2	60
			P	10.0	11.3	21.3	4.6	3.6	2.5	31.9	11.6	10.4	8.6	7.7	70
	Legitimate ..	{	M	10.5	12.4	23.0	4.9	3.8	2.7	34.4	13.0	11.3	9.3	8.1	76
			F	8.0	9.5	17.5	3.9	3.0	2.0	26.5	9.2	8.4	7.5	7.1	58
			P	9.3	11.0	20.3	4.4	3.4	2.4	30.5	11.1	9.9	8.4	7.6	67
	Illegitimate ..	{	M	28.1	19.1	47.2	8.6	7.1	6.5	69.3	27.3	23.9	15.9	11.6	147
			F	22.3	15.7	38.0	7.2	5.4	2.7	53.4	17.5	18.8	11.8	9.1	110
			P	25.2	17.4	42.6	7.9	6.3	4.6	61.5	22.4	21.4	13.9	10.4	129
All Areas.	North ..	..	..	11.1	12.9	24.0	5.6	4.4	3.0	36.9	13.7	12.5	10.9	9.9	84
	Midlands ..	..	..	9.7	10.9	20.6	4.1	3.4	2.3	30.4	10.6	8.9	7.5	6.6	63
	South ..	..	..	8.8	9.1	17.9	3.5	2.5	2.1	26.0	10.0	9.2	6.9	6.4	58
	Wales ..	..	..	10.1	12.8	22.9	5.1	4.1	2.1	34.1	11.7	10.8	8.6	6.2	71
London..	..	..	..	8.8	8.5	17.3	3.6	2.5	2.0	25.4	10.7	11.6	8.5	8.0	64
County Boroughs	England and Wales ..	..	..	10.3	12.0	22.3	5.1	4.0	2.7	34.2	13.7	12.8	10.8	9.8	81
	North ..	..	..	11.2	12.7	23.9	5.6	4.3	3.0	36.8	15.2	14.4	12.5	11.5	90
	Midlands ..	..	..	9.6	11.5	21.1	4.7	4.0	2.7	32.4	12.2	11.1	9.2	8.4	73
	South ..	..	..	8.3	9.8	18.1	3.2	2.4	2.1	25.8	11.1	9.7	7.6	7.0	61
	Wales ..	..	..	8.2	12.7	21.0	6.5	3.7	1.9	33.0	11.4	11.3	8.6	5.7	70
Other Urban Districts	England and Wales ..	..	..	10.0	11.6	21.6	4.4	3.6	2.4	32.1	10.7	9.2	7.8	6.9	66
	North ..	..	..	11.0	13.3	24.3	5.6	4.4	3.1	37.3	12.5	10.7	9.7	8.7	78
	Midlands ..	..	..	9.7	10.8	20.5	3.9	3.2	2.1	29.7	9.6	8.3	6.8	6.3	60
	South ..	..	..	8.5	9.4	17.9	3.5	2.6	2.1	26.2	9.1	7.1	5.3	4.8	52
	Wales ..	..	..	10.6	12.7	23.2	4.2	4.3	2.0	33.8	11.4	11.2	9.5	6.6	72
Rural Districts	England and Wales ..	..	..	10.1	11.0	21.1	4.3	3.3	2.3	31.0	10.0	7.6	6.3	5.3	60
	North ..	..	..	11.0	12.4	23.5	5.8	4.4	2.8	36.5	10.6	9.5	8.0	7.0	71
	Midlands ..	..	..	9.7	10.2	19.9	3.7	3.0	2.1	28.6	9.8	7.0	6.1	4.8	56
	South ..	..	..	9.4	10.0	19.4	3.3	2.5	2.0	27.3	8.3	5.5	4.5	4.2	49
	Wales ..	..	..	10.6	13.0	23.6	5.4	4.0	2.2	35.3	12.5	9.9	6.9	5.8	70

The comparisons suggested by Table X are facilitated by Table XI, which states the rates recorded for the various populations as ratios to those for England and Wales as a whole, and thus serves to analyse by age the comparison made in Table VI for the first year of life as a whole.

In this table it may be noted that (1) the excess mortality of male infants is considerable from the first day of life onwards, and greatly decreases as the end of the first year approaches. As in 15 of the 21 preceding years it was greater in the second month than any other. (2) the excess mortality of the great towns is but slight at birth, but gradually increases with age, reaching its maximum of 27 per cent. in the last three months of infancy; and (3) that the excess of mortality in the North over that in the South of England is greater than that of the county boroughs over the rural districts, and of more general application to all stages of infant life. In all these respects Table XI is in general accord with the experience of other recent years. As usual, mortality is highest at each age distinguished in the North, so far as England is concerned, and at all except 3-6 months it is lowest in the South.

	Days.		Weeks.					Months.				Total under 1 year	
	0-1		1-7	0-1	1-2	2-3	3-4	Total under 4 weeks.	4 weeks to 3 months.	3-6	6-9		9-12
England and Wales	100	100	100	100	100	100	100	100	100	100	100	100	100
{ P	113	113	113	110	111	118	113	117	114	111	111	107	113
{ M	87	87	87	89	88	81	87	82	85	89	89	93	87
{ F													
All Areas													
North	111	114	113	124	122	121	116	118	120	127	129	129	120
Midlands	97	96	97	90	96	93	95	91	86	86	86	86	91
South	88	81	84	76	70	84	82	86	88	80	83	83	83
Wales	101	113	108	111	114	84	107	101	104	99	80	80	102
London	88	75	81	79	69	83	80	93	112	99	104	104	92
County Boroughs—													
England and Wales	103	107	105	112	112	111	107	118	123	125	127	127	116
North	112	113	112	123	121	120	115	131	139	145	149	149	129
Midlands	96	102	99	103	112	109	102	105	106	107	109	109	105
South	83	87	85	70	66	86	81	95	93	88	90	90	87
Wales	83	113	99	141	103	76	104	98	109	100	74	74	100
Other Urban Districts—													
England and Wales	100	103	102	97	102	98	101	93	89	91	89	89	95
North	110	118	114	123	123	124	117	108	103	112	112	112	112
Midlands	98	95	96	85	90	85	93	83	80	79	81	81	86
South	85	83	84	77	74	87	82	79	68	62	62	62	75
Wales	106	112	109	93	120	83	106	98	107	110	85	85	103
Rural Districts—													
England and Wales	101	98	99	95	93	93	97	86	73	73	69	69	86
North	110	110	110	127	124	115	115	91	91	92	91	91	102
Midlands	97	90	93	81	83	87	90	84	67	71	62	62	80
South	94	89	91	73	70	80	86	72	53	53	54	54	71
Wales	106	116	111	118	113	91	111	108	95	80	76	76	100

For the first time since the commencement of this record in 1917, the mortality of the first 24 hours is not at a maximum in the rural districts of the North, whose excess of 10 per cent. over the general average was exceeded by that of 12 per cent. for the Northern county boroughs. The lowest corresponding rates are those for county boroughs of the South and of Wales, the rate for London, which in four of the ten years under comparison has been lowest of all, being distinctly higher, though, as always, definitely below the general average. This mortality varies much more by part of the country than by class of area, having been highest in the North in all, and lowest in the South in all but one (1919) of the last ten years. Comparing areas of the same class separately by part of the country the rate is seen to increase regularly from South to North in all three cases (county boroughs, urban districts, and rural districts). If this mortality is any index to the efficiency of the midwifery service this would seem to be lowest in the North and highest in the South, but it is conceivable that complications of labour, such as those arising from rickety deformities, may also be greatest in the North. As in eight others out of the ten years the rate for the rural districts was higher than that for England and Wales, the exception again being 1919. This may well be a natural consequence of the remoteness of many rural homes. As the rural districts of the North are at a disadvantage both as rural districts and as northern the constancy of their maximal excess is not surprising.

Causes of Infant Mortality.—The causes of infant mortality are set forth in Tables 8–12, which compare the records of 1926 with those of previous years, and show the incidence of mortality from each cause upon infants distinguished by sex, age, legitimacy, class of area, and section of the country. From these tables has been prepared the comparison in Table XII between the mortality from the chief causes distinguished at various ages in 1926, 1925, and 1921–25.

The fall of 8 per cent. as compared with the preceding quinquennium is seen to be chiefly accounted for by bronchitis and pneumonia, congenital debility, etc., premature birth, and convulsions, which jointly record a decline of 4·61 deaths per 1,000 births, or 79 per cent. of the total fall.

The only offset to these reductions consists of an increase of 6 per cent. in the mortality from congenital defects. It is of some interest to note that the largest fall at any age distinguished in Table XII, 26 per cent. of the total, has occurred in the first month of life, though the proportionate reduction is, as usual, less at this than at higher ages. This of course illustrates the fact that as infant mortality becomes progressively reduced, mainly by decrease of the more preventable deaths in later infancy, the relative importance of a given fall in neo-natal mortality

Table XII.—England and Wales : Comparison of Infant Mortality Rates in 1926 with those of recently preceding years.

	Under 4 weeks.	4 weeks to 3 months.	3-6 months.	6-9 months.	9-12 months.	Under 1 year.
Increase or Decrease of Mortality in 1926, per cent. of that in 1925.						
	- 1	- 8	- 8	- 10	- 16	- 6
Increase or Decrease of Mortality in 1926, per cent. of that in 1921-25.						
	- 5	- 10	- 10	- 9	- 12	- 8
Increase or Decrease from various Causes, as compared with 1921-25.						
Measles (7)	+ 0.01	—	- 0.03	- 0.04	- 0.09	- 0.16
Whooping cough (9)	—	+ 0.01	- 0.09	- 0.03	- 0.06	- 0.18
Influenza (11)	- 0.04	- 0.05	- 0.06	- 0.08	- 0.09	- 0.32
Tuberculosis, all forms (31-37)	—	—	- 0.07	- 0.06	- 0.02	- 0.15
Convulsions (80)	- 0.24	- 0.18	- 0.12	- 0.12	- 0.10	- 0.75
Bronchitis and pneumonia (99-101)	- 0.12	- 0.45	- 0.48	- 0.38	- 0.43	- 1.86
Diarrhoea and enteritis (113)	- 0.10	- 0.07	- 0.06	- 0.02	- 0.12	- 0.37
Developmental and wasting diseases (159, 160, 161 : 1, 162 : 2).	- 1.31	- 0.22	—	- 0.09	- 0.04	- 1.66
<i>Congenital defects (malformations and atelectasis) (159, 162 : 2).</i>	+ 0.14	+ 0.14	+ 0.07	—	—	+ 0.36
<i>Congenital debility, sclerema and icterus (160).</i>	- 0.67	- 0.19	- 0.06	- 0.09	- 0.04	- 1.04
<i>Premature birth (161 : 1)</i>	- 0.79	- 0.17	- 0.01	—	—	- 0.96
Suffocation—in bed or not stated how (180 part).	+ 0.01	—	—	- 0.01	—	—
Other causes	+ 0.26	- 0.29	- 0.21	- 0.06	- 0.12	- 0.42
All causes	- 1.54	- 1.25	- 1.12	- 0.89	- 1.07	- 5.85
Percentage Increase or Decrease as compared with 1921-25.						
Measles (7)	+100	—	- 30	- 10	- 12	- 12
Whooping cough (9)	—	+ 2	- 14	- 4	- 7	- 6
Influenza (11)	- 57	- 38	- 35	- 40	- 45	- 42
Tuberculosis, all forms (31-37)	—	—	- 20	- 13	- 4	- 11
Convulsions (80)	- 12	- 20	- 18	- 26	- 28	- 17
Bronchitis and pneumonia (99-101)	- 9	- 14	- 13	- 10	- 12	- 12
Diarrhoea and enteritis (113)	- 12	- 4	- 2	- 1	- 12	- 5
Developmental and wasting diseases (159, 160, 161 : 1, 162 : 2).	- 5	- 6	—	- 19	- 15	- 5
<i>Congenital defects (malformations and atelectasis) (159, 162 : 2).</i>	+ 3	+ 15	+ 18	—	—	+ 6
<i>Congenital debility, sclerema and icterus (160)</i>	- 16	- 12	- 7	- 32	- 29	- 15
<i>Premature birth (161 : 1)</i>	- 5	- 11	- 5	—	—	- 5
Suffocation—in bed or not stated how (180 part).	+ 4	—	—	- 33	—	—
Other causes	+ 7	- 18	- 14	- 5	- 11	- 5
All causes	- 5	- 10	- 10	- 9	- 12	- 8

Note.—The percentages in this table are based on rates per 100,000 births, and differ on this account from those derivable from Table III.

necessarily becomes greater, since this constitutes a constantly increasing proportion of the whole. The fall at these ages was almost entirely (95 per cent.) due to reduction of mortality from premature birth and congenital debility. Table 9 shows that no less than ten out of twenty-five causes of infantile death there distinguished are returned as causing less mortality in 1926 than in any one of the ten preceding years. These causes are tuberculous peritonitis, etc., other forms of tuberculosis apart from meningitis, non-tuberculous meningitis, convulsions, bronchitis, other respiratory disease apart from pneumonia, inflammation of the stomach, congenital debility, icterus, and

premature birth. By extending the comparison further back it may be seen how rapidly certain attributions of infantile death, in common use at the commencement of this century, are becoming obsolete. Thus the rate ($\cdot 25$) for abdominal tuberculosis in 1926 is only 8 per cent. of the 3.20 recorded for 1901, that for convulsions 22, and for bronchitis 34 per cent. of the 1901 rate, while that for overlying has fallen by 71 per cent. since 1904. On the other hand the pneumonia rate has risen slightly since 1901, clearly indicating a transfer in diagnosis from bronchitis to pneumonia. A decline of 74 per cent. in mortality attributed to congenital debility (from 20.10 in 1901 to 5.31 in 1926) is probably due largely to transference of certification to premature birth, the rate for which has fallen only from 19.96 to 17.49, or by 12 per cent., in the same time, and to congenital malformations, birth injury, and atelectasis, which record increases of 37, 132 and 23 per cent. respectively, their joint mortality having risen during this century from 5.78 to 8.36, or by 45 per cent.

If this interpretation of the rapid disappearance of congenital debility from death certificates as a consequence of increasing precision and definiteness in the form of certification is correct, it is of interest to note its features. In the first place it is satisfactory to note that the rate of fall is increasing, most of it having occurred during the last ten years (Table 9). This may have been influenced by cases of deprivation during the war, as the rate fell from 10.83 in 1917 to 5.71 in 1923, but since then only to 5.31 in 1926. While summer diarrhoea was still an important cause of infant deaths some of these were evidently attributed to congenital debility, for in three years of specially heavy diarrhoeal mortality, 1904, 1911 and 1913, the debility rate rose in sympathy with that from diarrhoea. This did not happen in 1921, when the diarrhoea rate again rose sharply, and generally speaking the correspondence seems now to have ceased, indicating that deaths from diarrhoea are no longer concealed by this form of certification. The reduction is naturally less for the younger infants, varying (since 1905, when the age distinctions quoted first become available) from 62 per cent. for the first four weeks of life to 82 at 9-12 months, but is quite large enough even for them to be capable of explaining the increases noted in other forms of mortality specially characterising early infancy. During the first four weeks of life mortality from congenital malformations, injury at birth, and atelectasis jointly has risen from 5.47 in 1905 to 6.36 in 1926, but that attributed to congenital debility has fallen from 7.64 to 2.94. Transfer from congenital debility is thus more than sufficient to account for such increases as have occurred in most other methods of statement applying particularly to early infancy, and it appears probable that some of the surplus may be applicable to premature birth, the recorded mortality from which during the first four weeks has fallen only from 18.26 in 1905 to 15.92 in 1926.

Table XIII.—England and Wales : Infant Mortality by Sex and Legitimacy, 1926.

	Deaths per 1,000 Births.				Mortality per cent.							
	All Infants.		Legitimate Infants.		Male of Female Infants.		Illegitimate of Legitimate Infants.					
	Male.	Female.	Male.	Female.	All Infants.	Legitimate.	Illegitimate.	Male.	Female.			
All causes.	Under four weeks	35.89	27.65	34.41	26.50	69.31	53.37	130	130	201	201	
	4 weeks—3 months	13.57	9.56	12.96	9.21	27.27	17.45	142	141	210	189	
	3-6 months	11.87	8.86	11.34	8.42	23.88	18.82	134	135	211	224	
	6-9 "	9.58	7.65	9.30	7.46	15.90	11.81	125	125	171	158	
	9-12 "	8.24	7.16	8.09	7.07	11.57	9.14	115	114	143	129	
	Total under 1 year	79.15	60.88	76.10	58.66	147.94	110.59	130	130	194	189	
	All ages under one year.	Measles (7)	1.23	1.04	1.22	1.03	1.40	1.37	118	118	115	133
		Whooping cough (9)	2.56	2.98	2.51	2.96	3.66	3.50	86	85	146	118
		Tuberculosis, all forms (31-37)	1.43	1.05	1.39	1.02	2.33	1.72	136	136	168	169
		Syphilis (38)	1.02	0.66	0.81	0.56	5.65	3.09	155	145	698	552
Convulsions (80)		4.23	3.01	4.11	2.95	7.05	4.26	141	139	172	144	
Bronchitis and pneumonia (99-101)		16.24	12.25	15.97	12.08	22.42	16.01	133	132	140	133	
Diarrhoea and enteritis (113)		8.89	6.59	8.38	6.23	20.42	14.63	135	135	244	235	
Developmental and wasting diseases (159, 160, 161: 1, 162: 2).		33.21	25.58	32.07	24.80	58.87	43.07	130	129	184	174	
Congenital defects (malformations and atelectasis) (159, 162: 2).		6.89	5.35	6.79	5.35	9.11	5.36	129	127	134	100	
Congenital debility, sclerema and icterus (160).		6.75	4.91	6.36	4.62	15.50	11.47	137	138	244	248	
All ages under one year.	Premature birth (161: 1).	19.57	15.32	18.92	14.83	34.26	26.24	128	128	181	177	
	Other causes	10.34	7.72	9.64	7.03	26.14	22.94	134	137	271	326	
	All causes	79.15	60.88	76.10	58.66	147.94	110.59	130	130	194	189	

Table XIII, which contrasts the mortality of male with that of female and of legitimate with that of illegitimate infants, shows that the excess in mortality of males, which has greatly increased along with and in consequence of (Review for 1921) the fall in infant mortality during the present century, was 30 per cent. in 1926, as against its maximum of 31 per cent. in 1922.

The male excess is shared, as usual, by all the principal causes of death quoted except whooping cough, its extent varying from 18 per cent. for measles to 41 for convulsions and 55 for syphilis.

The excess mortality of males was greater for illegitimate than for legitimate infants—34 per cent. for the former as against 30 for the latter. This is an exceptional experience, greater male excess for the legitimate having been recorded in each of, at least, the twenty preceding years.

This exception to the normal rule is the converse of another—that excess of mortality for the illegitimate was for the first time in many years greater for males (94 per cent.) than for females (89 per cent.) in 1926. The mortality of illegitimate infants, which has fallen, on the whole, at much the same rate as that of the legitimate, has risen since 1923 for males, whereas it shows a net fall for females. If the normally greater excess for female than for male illegimates represents the effects of differential neglect, the experience of 1926 may imply a change in this respect, associated with the increased care of illegitimate infants indicated by the rapid reduction of their mortality. Excess of mortality was greater for the illegitimate of both sexes during the war than in any recent year before or since, reaching a maximum of 116 per cent. for males and 132 for females in 1917. The rate of illegitimacy also went up at the same time or a little later (Table C), and has fallen rapidly since 1920. If these facts imply less differential neglect of illegitimate infants under normal conditions, when fewer of them are born, than under those of war, it is perhaps natural that any special neglect of females should also decrease at the same time.

Excess for the illegitimate is, as usual, very much greater for syphilis than for any other cause distinguished in the table.

Distribution throughout the country of Infant Mortality from various causes.—Table XIV, which is derived from Table 12, furnishes an analysis by cause of the differences in total mortality under one year of age shown in Tables V and VI. Table 12 having been first prepared for 1917, the results for nine years only are available for comparison.

The greatest departures from the average mortality of the whole country in Table 12 are furnished by the county boroughs of the North, with excesses under every cause distinguished, ranging from 4 to 77 per cent. and aggregating to 20·17 deaths per 1,000 births, and by the rural districts of the South, with comparatively favourable experience under every head except overlying, aggregating to 20·44 per 1,000 births.

In each of these populations the first place in order of numerical importance amongst the causes of death accounting for the differences is occupied by bronchitis and pneumonia, the second by diarrhœa, and the third by premature birth. Of the total difference between these two populations the three causes named account for 68 per cent., and bronchitis and pneumonia alone for 30 per cent. Respiratory disease and diarrhœa are amongst the most preventable causes of infant mortality, and it is upon them that the differences experienced mainly depend. They are diseases of town life, the mortality of each increasing regularly with urbanization in each of the three sections of England distinguished in Table XIV.

Apart from the usual frequency of ascription of infantile deaths to convulsions in Wales, the greatest excesses above the general average from any of the causes in any of the populations compared are 153 per cent. for measles in London and 77 for syphilis in the county boroughs of the North. The latter excess is in accordance with general experience, infant mortality from this cause being a feature both of the North generally and of the great towns generally. The excess of mortality ascribed to convulsions in Wales is, as usual, remarkable. For Wales as a whole the rate is almost double that for England and Wales. This excess applies mainly to the smaller towns, where it amounts to 94 per cent., and rural districts, 132 per cent. In the county boroughs the Welsh excess is much less at 21 per cent. The peculiar distribution of this mortality, which is much lower in London than for any other population distinguished in Table XIV, as well as its steady and rapid decrease from year to year (Table 9), clearly shows to what an extent it points merely to loose certification, wherein a symptom is substituted for its underlying cause. As a reduction of over 50 per cent. in the last ten years is recorded for England and Wales in Table 9, it may be said that the position of Wales in this matter now is merely that of the whole country less than ten years ago.

As in other recent years mortality from premature birth, to which half the deaths during the first four weeks of life were ascribed, varied much more with the geographical section of the country than with degree of urbanization. For great towns, small towns, and rural districts alike, its decrease in Table XIV from North to South is constant, but this does not hold good, except in the Midlands, for the decrease from county boroughs to rural districts. Taking the country as a whole in each case Table 12 shows that the excess for the North over the South is 41 per cent., but that for the county boroughs over the rural districts only 12 per cent. These facts would seem to accentuate the possibility of further reduction in neo-natal mortality, as it would seem more feasible to approximate the conditions of foetal and infant life in the North to those prevailing in the South than to overcome for the great towns their disadvantages as compared with the rural districts.

Table XIV.—Comparison of Infant Mortality from the Principal Causes in different Classes of Area and Sections of the Country, 1926.

		Measles (7).	Whooping Cough (9).	Tuberculosis, all forms (31-37).	Syphilis (38).	Convulsions (80).	Bronchitis and Pneumonia (99-101).	Diarrhoea and Enteritis (113).	Congenital Malformations (159).	Congenital Debility and Sclerema (160: 1).	Premature Birth (161: 1).	Injury at Birth (161: 2).	Suffocation—in bed, or not stated how (180 pt).	Other Causes.	All Causes.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Differences from Rates for England and Wales per 100,000 Births.															
All Areas	North	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Midlands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	South	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
London	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

County Boroughs	England and Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	North	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Midlands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	South	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Urban Districts	England and Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	North	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Midlands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	South	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Rates per cent. of those for England and Wales.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Rural Districts														
England and Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North	75	36	18	37	12	367	364	1	49	60	10	15	80	1008
Midlands	74	156	5	30	95	72	219	17	56	214	6	40	24	138
South	73	13	35	33	79	420	423	2	94	175	6	6	68	1389
Wales	86	67	13	47	136	679	442	34	129	227	1	4	187	2044
	56	64	8	52	478	176	302	30	47	107	55	38	117	32

All Areas														
North	109	132	116	143	134	126	130	108	117	115	106	89	111	120
Midlands	68	98	90	77	78	88	76	101	95	97	99	114	94	91
South	145	57	95	79	53	78	95	87	79	82	93	119	91	83
Wales	43	104	87	70	190	101	77	103	115	100	98	30	99	102
London	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	253	47	92	92	42	92	139	81	76	81	89	130	97	92
County Boroughs														
England and Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North	112	108	122	148	109	124	139	105	109	108	101	123	110	116
Midlands	145	120	128	177	129	139	170	104	115	118	107	118	119	129
South	80	104	114	115	84	113	109	108	107	101	91	140	99	105
Wales	72	74	132	82	77	89	87	89	89	79	89	128	98	87
	39	75	87	139	121	103	96	117	95	91	113	32	116	100
Other Urban Districts														
England and Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North	75	102	89	82	108	93	74	102	105	100	99	82	95	95
Midlands	81	142	100	120	147	119	89	116	121	112	105	68	103	112
South	78	88	81	55	72	77	68	96	93	99	103	105	91	86
Wales	74	53	85	77	55	66	57	91	82	82	99	102	87	75
	40	105	84	60	194	109	77	95	128	101	69	26	98	103
Rural Districts														
England and Wales	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North	34	113	85	56	103	74	53	100	91	97	107	74	91	86
Midlands	35	157	104	64	126	95	72	104	111	112	104	30	103	102
South	36	105	72	61	78	71	46	100	82	90	104	89	93	80
Wales	25	76	90	44	63	52	43	93	76	87	99	107	79	71
	51	123	94	38	232	88	61	107	109	106	136	33	87	100

In some other highly developed countries, however, the advantages of rural environment for infant life, so clearly shown by Table X for England and Wales, are not in evidence. Thus rural excess is the rule in Prussia, infant mortality in the (29) cities being returned as 98, for instance, in 1925, as against 104 in Prussia as a whole. And a recent report on the vital statistics of Pennsylvania, notes that "the city child has now (1925 and 1926) a better chance of surviving the first year of life than has its new born country cousin," whereas twelve years previously urban and rural infant mortalities were practically identical. In this case the rural population is largely mining rather than agricultural.

Mortality at Ages over One Year.

Table XV gives the crude and standardized death-rates at all ages for sexes and persons for the whole country, as well as the mortality per million living at different ages, for 1925 and 1926, and, in order to provide means of comparison with the most recent pre-war experience, for 1911-14.

Table XV.—England and Wales : Mortality from all Causes per Million Population, 1911-14, 1925, and 1926. (Total deaths registered.)

			Males.			Females.			Persons.		
			1911-14.	1925.	1926.	1911-14.	1925.	1926.	1911-14.	1925.	1926.
All Ages :											
Crude	..	..	14,895	12,949	12,384	13,061	11,434	10,911	13,948	12,158	11,616
Standardized	A	..	14,899	11,878	11,236	12,263	9,683	9,099	13,503	10,710	10,096
	B	..	15,974	12,928	12,218	13,720	11,118	10,437	14,807	11,985	11,290
0-..	..	..	40,572	25,286	23,343	33,900	20,702	18,767	37,253	23,023	21,083
5-..	..	..	3,302	2,538	2,548	3,253	2,400	2,304	3,277	2,470	2,427
10-..	..	..	1,971	1,684	1,521	2,054	1,650	1,464	2,013	1,667	1,493
15-..	..	..	2,940	2,615	2,467	2,681	2,542	2,380	2,809	2,579	2,424
20-..	..	..	3,719	3,286	3,093	3,198	3,063	2,934	3,448	3,172	3,012
25-..	..	..	4,911	3,857	3,679	4,054	3,420	3,315	4,462	3,618	3,481
35-..	..	..	8,030	6,349	6,089	6,432	4,766	4,637	7,201	5,496	5,305
45-..	..	..	14,797	11,603	11,053	11,353	8,603	8,191	13,007	10,030	9,547
55-..	..	..	29,741	24,454	23,312	22,453	18,104	17,410	25,883	21,122	20,215
65-..	..	..	64,043	59,586	56,843	51,181	46,203	43,893	56,882	52,211	49,719
75-..	..	..	137,646	140,249	132,709	113,927	115,830	107,975	123,339	125,432	117,717
85 and upwards	..	..	265,564	289,967	282,020	234,632	269,130	254,177	245,481	276,039	263,449

A. English Standard (Population of England and Wales, 1901). B. International Standard. (See page 1.)

At all ages under 85 the mortality of each sex is lower than it was before the war. At all ages jointly the crude rate has fallen by 16·7 per cent., but when allowance is made by standardization for increased age of the population the extent of the fall is increased to 25·2 per cent. It is much the same for the two sexes. Of the two standards used in the table the English (A) shows a rather greater fall than the International (B), because it gives less weight to the higher ages, at which reduction has been least. This difference between the two would be greater were it not that the English standard gives less weight also to mortality at 0-5, at which the fall has been greatest. The extent of the fall at the various ages distinguished can be better appreciated from Table XVI, in which the mortality in 1925 and 1926 of each sex and age group is shown as a proportion of the corresponding rate for 1911-14.

The fall is much greater at 0-5 than at any later period of life, amounting in 1926 to about 42 per cent. for males and 45 per cent. for females. Thereafter it very rapidly decreases with advancing age up to early maturity, reaching a minimum of 16 per cent. for males at 15-20 and of 8 per cent. for females at 20-25.

Table XVI.—England and Wales : Mortality at various ages of Males and Females from all causes in 1925 and in 1926 per cent. of that for the same sex and age in 1911–14.

		<i>Males.</i>		<i>Females.</i>	
		1925.	1926.	1925.	1926.
All Ages :					
Crude ..	..	86·9	83·1	87·5	83·5
Standardized	A	79·7	75·4	79·0	74·2
	B	80·9	76·5	81·0	76·1
0—	..	62	58	61	55
5—	..	77	77	74	71
10—	..	85	77	80	71
15—	..	89	84	95	89
20—	..	88	83	96	92
25—	..	79	75	84	82
35—	..	79	76	74	72
45—	..	78	75	76	72
55—	..	82	78	81	78
65—	..	93	89	90	86
75—	..	102	96	102	95
85—	..	109	106	115	108

After this age another period of increasing decline sets in, which reaches its maximum of 25 per cent. for males at 25–35 and 45–55 and of 28 for females at 35–55. Thereafter the decrease recorded becomes steadily less for each sex, till at ages over 85 it disappears altogether. The relative smallness of the decline for females at 20–25 is mainly due to tuberculosis. At this age tuberculosis mortality has declined by 17 per cent. for males and increased by 3 per cent. for females, whereas mortality from other causes has decreased by 17 per cent. for both males and females. Even from causes other than tubercle however the decline in early adult life (15–25) is less than in middle age or in childhood.

The great decline in early life is a feature common to the experience, during the period dealt with, of many countries ; and that in later middle age is from a mortality before the war in this country which was high relatively to that of most other civilized states. But if these facts to some extent discount the significance of the falls noted in early childhood and later middle age, the smallness of the fall in early adult life is also partly explained by the fact that before the war English mortality at these ages was low compared with that of most other countries. As pointed out in previous Reviews, the large falls recorded for males aged 25–55 show that the hardships of war have not prevented the survivors of the men who served in it from sharing to the full in the reduction of mortality which has since occurred.

Table XV shows that as compared with the mortality of 1925, that of 1926 decreased at all ages, with one trifling exception at 5–10 for males.

Of the two sexes, males suffered the higher mortality at every age, as also in 1925. Table 3 shows that this never happened in any previous year, the rate for females having always, till 1925, been at least equal to that for males at one or more of the three quinquennia 5-20 (the ages of lowest mortality).

The great fall in mortality at age 0-5 (Table XVI) is somewhat lessened when allowance is made by standardization, on the basis of the population of England and Wales in 1901, for change in the proportions living at the five years of life making up the group (Table XVII). When the birth-rate is falling fast, as during the war and since 1920, the proportion to the whole group aged 0-5 of infants under one year of age is abnormally low, and the crude death-rate of the group tends to fall merely because of the small effect of the high mortality of these infants in consequence of their small numbers. When the birth-rate rises, the opposite effect is produced, and allowance by standardization for these changes in the composition of the population at risk increases the death-rate in the first case, and reduces it in the second, as shown in the Table for the years 1920-22. Both crude and standardized rates for 1926 are the lowest in Table XVII for each sex, and Table 3 shows that the crude rate for each sex is far below any recorded prior to 1916. The true advantage of 1926 over 1923, as measured by the standardized rate, is very small for each sex, though for each the crude rate has fallen appreciably.

Table XVII.—England and Wales: Comparison of Crude and Standardized Death-Rates per 1,000 living at Age 0-5, 1916-26.

			Males.		Females.		Both Sexes.	
			Crude.	Stand-ardized.	Crude.	Stand-ardized.	Crude.	Stand-ardized.
1916	..	..	32.4	34.1	26.4	27.8	29.4	31.0
1917	..	..	31.8	34.3	26.3	28.4	29.1	31.4
1918	..	..	38.9	43.1	34.1	37.5	36.5	40.3
1919	..	..	32.8	36.6	26.4	29.5	29.6	33.1
1920	..	..	36.2	31.8	28.8	26.0	32.5	29.0
1921	..	..	32.3	29.2	25.8	23.6	29.1	26.4
1922	..	..	30.2	28.5	24.5	23.1	27.4	25.8
1923	..	..	24.3	25.0	19.6	20.1	22.0	22.5
1924	..	..	25.1	27.3	20.2	21.8	22.6	24.6
1925	..	..	25.3	27.1	20.7	22.1	23.0	24.6
1926	..	..	23.3	24.9	18.8	20.0	21.1	22.4

Mortality at 1-5.—Table XVIII shows that at these ages, at which 32 per cent. of the total deaths under five years of age occurred in 1926 (Table 15) the recent reduction of mortality has been greater than in that of infants, though the latter has attracted far more attention. The standardized rate for 1926 (both sexes)

is the lowest yet recorded, and shows a reduction of 45 per cent. as compared with that for 1911–14, or considerably more than that of 38 per cent. for the first year of life. If instead of the rate shown for infancy in Table XVIII the more usual measure of infant mortality is employed, the latter reduction is reduced to 36 per cent., so the excess of fall at 1–5 is quite considerable. As it may be seen from Table XXIV that mortality is much more variable with locality at 0–5 than at any other age it follows that 1–5 (and especially 1–2—Table XIX) may be looked upon as the age of maximum instability of mortality both temporally and locally, and at which, therefore, it is most preventable.

The distribution throughout the country of mortality at these ages is shown in Table XIX, which may be compared with Tables V and VI (infant mortality). The greatest excess over the general average recorded in Table XIX is one of 58 per cent. for the county boroughs of the North at 1–2 years, while the most favourable position occupied by any of the populations compared is that of 52 per cent. below the general average by the rural districts of the South at the same age.

The differences in mortality between the populations compared are greater at 1–2 than at 2–5 years, and greater at the latter age than in the first year of life (Table VI), the influence of environment upon mortality being thus, as usual, at a maximum in the second year of life. At both these ages the general type of mortality distribution is the same as that persistently maintained for infant mortality, and illustrated by Tables V and VI.

Table XIX.—Distribution of Mortality in Early Childhood, 1926.

	1–2 years.					2–5 years. (Mean Annual Mortality.)				
	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.
Deaths per 1,000 Living (Both Sexes).										
London	—	—	19·11	—	19·11	—	—	5·19	—	5·19
County Boroughs	29·01	18·11	13·63	14·60	23·32	7·21	4·96	4·64	4·65	6·13
Other Urban Districts ..	22·54	14·41	10·15	16·16	16·60	6·30	4·58	3·88	5·02	5·08
Rural Districts	17·49	11·47	8·78	13·50	12·54	5·58	3·67	3·17	3·86	4·02
All Areas	25·25	14·89	14·43	15·07	18·38	6·69	4·47	4·45	4·61	5·24
Mortality per cent. of that in England and Wales.										
London	—	—	104	—	104	—	—	99	—	99
County Boroughs	158	99	74	79	127	138	95	89	89	117
Other Urban Districts ..	123	78	55	88	90	120	87	74	96	97
Rural Districts	95	62	48	73	68	106	70	60	74	77
All Areas	137	81	79	82	100	128	85	85	88	100
Mortality per cent. of that in England and Wales in the same class of Area.										
County Boroughs	124	78	8	63	100	118	81	76	76	100
Other Urban Districts ..	136	87	61	97	100	124	90	76	99	100
Rural Districts	139	91	70	108	100	139	91	79	96	100

Table XIX also shows that, when similar classes of area are compared in each case, mortality at these, as generally at other, ages decreases from the North to the South of England, no exception to this rule occurring at either age dealt with. At age 1-2 years the mortality of the North is more than double that of the South in both large and small towns and almost double in the rural districts. The lower section of the table shows that the Northern excess, both at 1-2 and at 2-5, was lowest in the county boroughs and highest in the rural districts. The advantage of the South, on the other hand, was greatest in the county boroughs and least in the rural districts at both ages. Both of these observations apply with great regularity year after year, exceptions occurring only for age 2-5 in certain years.

The results of the mortalities recorded in Tables V and XIX are demonstrated in Table XX by showing, in life table form, the numbers of survivors at the end of each of the first five years of life, out of 10,000 children born to the various populations dealt with in these tables, assuming continuance of the mortality experience of 1926. This table continues a series commenced in 1911-14, but since then resumed only for 1922, 1923 and 1926. The method of its construction is that described in the Review for 1922, except that, as in 1923, the three years 2-5 have been dealt with individually.

Comparing the results with those for 1922, the present table shows more survivors for every population dealt with at 1, 2, and 5 years of age alike. Comparison with 1923, which returned the lowest mortality except that for 1926 yet recorded for ages 0-5 (Table XVII), is naturally not so favourable. The North of England shows improvement (over 1923) in nearly all cases, and Wales in most, a fall in Welsh urban mortality being partly offset by a rise in rural. Improvement in the Midlands is confined to the county boroughs at ages 4 and 5 and to the rural districts at age 1. Survivors in the South are fewer at each age in each class of area than in 1923.

It appears, therefore, that in 1926 there was some diminution of the excess of child mortality in the North as compared with the South of England, but how large that excess still remains is very evident from the table. This presents no exception, at any age in any class of area, to the rule of increase of survivors from North to Midlands and from Midlands to South. The result is that there are more survivors in the South at 5 years of age in each class of area than in the North at one year, though the fact that there are fewer in London (at 5) than in any class of Northern areas (at one) reduces the number of Southern survivors at 5 years very slightly below that of Northern at 1 year. The life table deaths for the first five years of life are 48 per cent. more in the North than in the South.

Table XX.—Mortality of Early Childhood in 1926 : Survivors of 10,000 Children born.

	North.	Mid-lands.	South.	Wales.	England and Wales.
At end of First Year.					
London	—	—	9,357	—	9,357
County Boroughs ..	9,096	9,266	9,390	9,300	9,187
Other Urban Districts ..	9,211	9,393	9,475	9,275	9,332
Rural Districts	9,284	9,437	9,502	9,295	9,399
All Areas	9,160	9,361	9,416	9,286	9,298
At end of Second Year.					
London	—	—	9,180	—	9,180
County Boroughs ..	8,836	9,100	9,263	9,165	8,975
Other Urban Districts ..	9,006	9,259	9,379	9,126	9,178
Rural Districts	9,123	9,329	9,419	9,170	9,282
All Areas	8,932	9,223	9,281	9,147	9,129
At end of Third Year.					
London	—	—	9,110	—	9,110
County Boroughs ..	8,737	9,037	9,211	9,100	8,893
Other Urban Districts ..	8,923	9,201	9,331	9,074	9,114
Rural Districts	9,049	9,282	9,380	9,122	9,230
All Areas	8,842	9,166	9,224	9,093	9,061
At end of Fourth Year.					
London	—	—	9,067	—	9,067
County Boroughs ..	8,681	8,996	9,166	9,064	8,843
Other Urban Districts ..	8,872	9,163	9,296	9,028	9,071
Rural Districts	9,004	9,251	9,353	9,093	9,197
All Areas	8,789	9,129	9,185	9,054	9,018
At end of Fifth Year.					
London	—	—	9,036	—	9,036
County Boroughs ..	8,644	8,964	9,135	9,038	8,809
Other Urban Districts ..	8,836	9,131	9,269	9,089	9,038
Rural Districts	8,970	9,226	9,330	9,063	9,170
All Areas	8,753	9,099	9,156	9,020	8,986

The causes of death accounting for the unprecedented lowness of mortality at 1-5 are seen from Table XXI to have been mainly the first three mentioned, measles, scarlet fever, and whooping cough, which jointly account for almost two thirds of the fall of 14 per cent. in 1926 as compared with 1925, though all the causes distinguished, except diphtheria, diarrhoea, congenital malformations, and violence other than burns, record decline in some degree. The continuing fall of mortality from burns and scalds, which is now only 57 per cent. of what it was in 1911-14, provides gratifying evidence of the increasing care taken of child-life as its abundance diminishes. This is the age at which such deaths chiefly occur, 55 per cent. of all deaths of males, and 32 per cent. of those of females in 1926, having occurred at 1-5 (Table 17). This fall is not being shared to any considerable extent by other forms of accidental death, mortality from which exceeded that from burns and scalds in 1926 for the first time during the period (1920-26) covered by this series of tables. As so large a proportion of the reduction of mortality in 1926 is accounted for by infectious disease an early rebound must be expected, even though the rates from these causes are now only one third to a half of what they were in 1911-14, so that, notwithstanding its inevitable yearly variations, the fall in their mortality has been extraordinarily rapid. These diseases, together with the broncho-pneumonia to which they so frequently give rise, are by far the most important causes of mortality at this period of life (whence its special preventability), the first five causes listed in Table XXI, together with broncho-pneumonia, accounting for 50 per cent. of the total mortality in 1926.

Table XXI.—England and Wales : Deaths from Various Causes per Million living at Ages 1-5 Years in 1911-14, 1925, and 1926. (Both Sexes.)

Cause of Death.	Death-rate.			Cause of Death.	Death-rate		
	1911-14.	1925.	1926.		1911-14.	1925.	1926.
7. Measles	2,671	1,326	848	98.2. Laryngitis	152	47	46
8. Scarlet Fever	373	172	105	99. Bronchitis	871	467	378
9. Whooping Cough	1,215	1,108	749	100. Broncho - pneumonia	2,169	2,049	1,928
10. Diphtheria	780	473	474	101. Pneumonia (Lobar and not otherwise defined).	866	517	478
11. Influenza	60	155	133	Other Respiratory Diseases	140	80	69
31. Tuberculosis of Respiratory System.	237	145	134	112 : 1 Inflammation of the Stomach.	94	40	36
32. Tuberculosis of Nervous System.	705	459	426	113 & 114. Diarrhoea and Enteritis.	1,638	466	502
33. Tuberculosis of Intestines and Peritoneum.	391	161	140	128. Acute Nephritis ..	89	46	43
34-37. Other Tuberculous Diseases.	288	159	145	159. Congenital Malformations.	85	75	75
56. Rickets	172	102	86	179. Burns and Scalds ..	360	242	207
71. Meningitis	451	188	165	Other Violence	274	226	231
80. Convulsions	460	191	153	Other Causes	1,069	879	848
				All Causes	15,610	9,773	8,399

Mortality of the Aged.—The relative importance of this section of the population is increasing very rapidly, as a result of the fall in progress both of the death-rate and of the birth-rate. The former operates directly by increasing the number of survivals to

old age, and the latter indirectly by decreasing the numbers living at the earlier ages. As a result of the operation side by side of these two processes, the population at ages over 70 increased by 22 per cent. between 1911 and 1921, while that at all ages increased by 5 per cent. only.

The principal causes to which mortality at ages over 70 is attributed are set out in Table XXII in comparison with corresponding figures for other recent years. In making these comparisons the declining vogue of "old age" as a form of death return causes a difficulty. The proportion of deaths so certified at ages over 70 has fallen from 23·7 per cent. in 1911–20 to 16·3, the lowest figure yet reached, in 1926, with, of course, a corresponding increase in the proportions and death-rates assignable to defined causes.

Table XXII.—England and Wales : Mortality over 70 Years of Age in 1911–20, 1921–25, 1925, and 1926, from the Chief Causes of Death.

	Deaths from each Cause per 1,000 Total Deaths.				Mortality per 1,000 Living			
	1911– 20.	1921– 25.	1925.	1926.	1911– 20.	1921– 25.	1925.	1926.
MALES.								
Influenza (11)	20	25	25	16	2·3	2·7	2·8	1·7
Cancer (43–49)	81	101	106	111	9·4	11·0	11·8	11·7
Heart Diseases (87–90)	149	169	185	194	17·2	18·4	20·6	20·5
Disease of Blood Vessels, including Cerebral Hæmorrhage (74, 91–93)	147	184	191	198	16·9	20·1	21·2	20·8
Bronchitis (99)	137	127	121	110	15·9	13·9	13·4	11·6
Pneumonia (100, 101)	34	35	37	33	4·0	3·9	4·1	3·5
Chronic Nephritis (129)	29	27	26	26	3·3	2·9	2·9	2·8
Old Age (164)	223	168	148	148	25·7	18·3	16·5	15·6
Other Causes	180	164	161	164	20·8	17·9	17·8	17·3
All Causes	1,000	1,000	1,000	1,000	116·0	114·9	111·1	105·5
Females.								
Influenza (11)	24	30	29	19	2·3	2·8	2·9	1·8
Cancer (43–49)	87	100	103	111	8·6	9·6	10·0	10·2
Heart Diseases (87–90)	154	186	201	210	15·2	17·8	19·5	19·4
Disease of Blood Vessels, including Cerebral Hæmorrhage (74, 91–93)	139	167	172	182	13·7	16·0	16·7	16·8
Bronchitis (99)	149	137	132	113	14·8	13·1	12·9	10·4
Pneumonia (100, 101)	32	35	36	33	3·2	3·3	3·5	3·1
Chronic Nephritis (129)	21	20	20	22	2·0	1·9	1·9	2·0
Old Age (164)	249	194	178	176	24·5	18·5	17·3	16·2
Other Causes	145	131	129	134	14·4	12·5	12·6	12·2
All Causes	1,000	1,000	1,000	1,000	101·0	96·6	97·3	92·1
Persons.								
Influenza (11)	22	27	27	18	2·3	2·8	2·8	1·7
Cancer (43–49)	85	100	104	111	8·9	10·2	10·7	10·9
Heart Diseases (87–90)	152	179	194	203	16·0	18·1	20·0	19·8
Disease of Blood Vessels, including Cerebral Hæmorrhage (74, 91–93)	142	175	181	189	15·0	17·7	18·6	18·5
Bronchitis (99)	144	133	127	112	15·2	13·4	13·1	10·9
Pneumonia (100, 101)	33	35	37	33	3·5	3·5	3·8	3·2
Chronic Nephritis (129)	24	23	23	24	2·6	2·3	2·3	2·3
Age Old (164)	237	182	165	163	25·0	18·4	17·0	16·0
Other Causes	161	146	142	147	17·0	14·7	14·7	14·3
All Causes	1,000	1,000	1,000	1,000	107·2	104·0	103·0	97·6

The total mortality of 97·6 per 1,000 persons living at these ages is lower than for any year since 1915 except 1920 (95·8) and 1923 (96·1). By far the most important share, 39·2 per cent., in this mortality is taken by diseases of the heart and blood vessels, but those of cancer and of bronchitis are also of importance. Amongst the causes mentioned the shares of cancer, diseases of the heart, and diseases of the blood vessels show continuous increase during the periods covered by the table, and those of bronchitis and of old age continuous decrease. There is much reason to believe that cancer mortality at this time of life has always been much understated, and an increasing tendency is noticeable at the present time to attribute deaths of aged sufferers from chronic bronchitis to heart disease resulting from it (see page 91.) Probably therefore most of the changes noted are due rather to improvement of or at least change in, certification than to actual change in the type of mortality.

Centenarians.—Among the deaths registered during the year there were 88 of reputed centenarians, 27 of whom were males and 61 females. In the preceding three years the numbers were 96, 86 and 92 respectively. Particulars of the ages returned and of the classes of area concerned are given in Table XXIII.

Table XXIII.—England and Wales : Age at Death of Centenarians, 1926.

	Males.								Females.							
	100 and over	100.	101.	102.	103.	104.	105.	106.	100 and over	100.	101.	102.	103.	104.	105.	106.
London	—	—	—	—	—	—	—	—	11	4	3	—	3	1	—	—
County	4	2	—	1	—	—	1	—	14	6	2	2	—	3	—	1
Boroughs ..																
Other Urban ..	9	4	2	3	—	—	—	—	20	7	7	3	2	1	—	—
* Districts ..																
Rural Districts ..	14	6	3	2	1	1	1	—	16	8	3	1	4	—	—	—
All Areas	27	12	5	6	1	1	2	—	61	25	15	6	9	5	—	1

Mortality at different Periods of Life in different Parts of England and Wales.

Total mortality, crude and standardized, from all causes, and the rates from all causes for nine different age periods, are shown in Table XXIV for males, females, and persons of both sexes in the 20 sections of the population to which subdivision jointly by class of area and part of the country leads in Table V and many similar tables. The rates for both sexes jointly are compared with the general average for the whole country in the first part of Table XXV, and with the average for all areas of similar class in the second. A diagram based on the first of these two sets of

Table XXIV.—Civilian Mortality from all Causes

	All Areas.					London.	County Boroughs.				
	North.	Midlands.	South.	Wales.	England and Wales.		North.	Midlands.	South.	Wales.	England and Wales.

MALES.

All Ages—											
Crude	1,322	1,173	1,255	1,192	1,248	1,287	1,403	1,254	1,334	1,204	1,340
Standardized ..	1,297	1,027	1,036	1,153	1,125	1,172	1,421	1,216	1,085	1,256	1,309
0—	2,931	2,069	1,899	2,232	2,334	2,140	3,200	2,407	2,000	2,263	2,787
5—	231	187	180	201	201	192	235	210	181	250	223
15—	303	260	258	311	279	274	331	290	265	302	311
25—	394	346	364	371	370	368	413	384	388	392	401
35—	653	574	601	612	612	675	740	690	617	699	710
45—	1,207	1,003	1,107	1,087	1,107	1,302	1,373	1,195	1,162	1,201	1,288
55—	2,623	2,073	2,252	2,503	2,331	2,703	2,983	2,541	2,401	2,593	2,760
65—	6,588	5,153	5,267	6,190	5,684	6,175	7,214	6,191	5,456	7,126	6,647
75 and upwards ..	16,769	13,987	13,979	15,317	14,749	15,388	18,001	16,901	14,775	17,560	17,040

FEMALES.

All Ages—											
Crude	1,152	1,044	1,075	1,079	1,091	1,053	1,183	1,064	1,157	1,004	1,135
Standardized ..	1,063	837	810	972	910	888	1,126	949	844	981	1,028
0—	2,368	1,652	1,522	1,782	1,877	1,733	2,581	1,900	1,565	1,768	2,228
5—	223	167	163	181	186	176	237	188	197	173	215
15—	286	247	239	346	265	243	292	257	263	306	278
25—	361	320	292	407	332	292	369	342	331	370	356
35—	522	427	424	513	464	445	545	474	465	536	513
45—	915	769	748	906	819	844	972	905	724	1,032	923
55—	2,000	1,584	1,598	1,954	1,741	1,797	2,128	1,818	1,701	2,097	1,974
65—	5,230	4,007	3,914	4,977	4,389	4,395	5,495	4,723	3,903	4,940	4,992
75 and upwards ..	14,235	12,105	12,038	12,638	12,627	12,900	14,863	13,499	12,280	12,949	13,856

PERSONS.

All Ages—											
Crude	1,234	1,106	1,158	1,136	1,166	1,161	1,288	1,154	1,236	1,104	1,232
Standardized ..	1,172	926	915	1,056	1,010	1,020	1,264	1,073	956	1,107	1,159
0—	2,652	1,864	1,713	2,010	2,108	1,939	2,893	2,156	1,785	2,018	2,510
5—	227	178	172	191	194	184	236	199	189	212	219
15—	294	253	248	328	272	258	311	273	264	304	294
25—	376	332	323	389	349	324	389	361	355	381	376
35—	583	495	501	562	531	547	635	574	530	618	604
45—	1,055	880	911	998	955	1,056	1,165	1,044	917	1,120	1,098
55—	2,300	1,818	1,897	2,234	2,021	2,219	2,535	2,161	2,008	2,353	2,346
65—	5,850	4,528	4,500	5,562	4,972	5,167	6,258	5,377	4,542	6,005	5,722
75 and upwards ..	15,224	12,847	12,763	13,729	13,448	13,772	16,006	14,739	13,148	14,750	15,008

per 100,000 living at Various Ages, 1926.

Other Urban Districts.					Rural Districts.					All Urban Districts.				
North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.

MALES

1,267	1,111	1,228	1,150	1,190	1,153	1,167	1,167	1,252	1,173	1,350	1,175	1,276	1,166	1,267
1,239	996	963	1,181	1,082	1,023	884	837	1,071	923	1,349	1,091	1,090	1,203	1,188
2,680	1,979	1,666	2,252	2,190	2,489	1,768	1,520	2,177	1,925	3,002	2,180	1,983	2,255	2,439
234	184	181	201	202	211	164	151	169	172	235	196	187	214	209
278	247	250	308	265	258	243	229	321	252	310	266	266	306	286
381	325	384	340	357	351	330	313	409	340	401	352	375	356	377
568	546	564	616	564	510	464	463	540	482	673	612	633	641	643
1,097	991	993	1,095	1,037	817	791	787	996	817	1,266	1,083	1,184	1,127	1,182
2,468	2,030	2,011	2,667	2,224	1,782	1,681	1,633	2,232	1,743	2,776	2,250	2,427	2,645	2,513
6,583	5,065	4,932	6,466	5,611	4,907	4,443	4,207	5,464	4,564	6,950	5,535	5,616	6,664	6,098
17,292	13,711	13,433	16,200	14,708	13,480	12,671	12,681	13,844	12,907	17,694	14,917	14,499	16,578	15,642

FEMALES.

1,137	1,001	1,071	1,048	1,064	1,063	1,086	1,071	1,178	1,087	1,165	1,030	1,076	1,035	1,092
1,036	811	747	1,011	884	898	753	709	926	791	1,091	872	834	1,002	944
2,207	1,596	1,320	1,835	1,781	1,925	1,413	1,219	1,699	1,522	2,439	1,739	1,589	1,816	1,966
212	160	151	193	179	195	152	128	166	158	228	173	172	188	194
283	241	231	357	264	269	244	223	356	257	288	248	243	341	267
351	302	272	396	321	348	319	293	453	333	362	320	292	388	331
513	401	385	483	441	450	406	399	547	428	533	434	429	499	472
879	724	675	865	774	776	672	662	888	712	935	804	768	914	846
1,967	1,540	1,483	2,083	1,701	1,615	1,402	1,311	1,713	1,448	2,063	1,659	1,672	2,087	1,825
5,260	3,928	3,653	5,560	4,356	4,280	3,479	3,464	4,363	3,701	5,399	4,257	4,039	5,378	4,609
14,309	12,038	11,658	13,361	12,548	12,230	11,188	11,122	11,869	11,387	14,636	12,606	12,308	13,243	13,083

PERSONS.

1,200	1,053	1,141	1,099	1,124	1,108	1,126	1,117	1,215	1,129	1,254	1,099	1,167	1,101	1,175
1,130	898	848	1,089	976	958	814	769	993	853	1,211	974	953	1,093	1,058
2,446	1,790	1,496	2,046	1,988	2,210	1,593	1,371	1,941	1,726	2,723	1,962	1,789	2,038	2,205
223	172	166	197	191	203	158	140	167	165	231	185	179	201	202
281	244	239	332	265	263	243	226	337	254	299	257	253	324	276
365	313	318	368	337	349	324	302	431	336	380	335	327	372	352
538	467	460	549	497	478	433	427	544	453	598	515	518	570	550
983	849	814	984	898	796	729	720	942	762	1,094	936	956	1,024	1,004
2,206	1,771	1,716	2,383	1,947	1,698	1,540	1,465	1,972	1,593	2,403	1,939	2,014	2,374	2,148
5,862	4,431	4,186	5,996	4,912	4,590	3,937	3,810	4,893	4,112	6,094	4,824	4,707	5,998	5,266
15,475	12,666	12,304	14,500	13,364	12,802	11,830	11,789	12,696	12,046	15,783	13,464	13,086	14,571	14,024

Table XXV.—England and Wales, 1926 : Comparison of Mortality from all causes at various Ages in sections of the Population differentiated by Urbanization and by Geographical Situation.

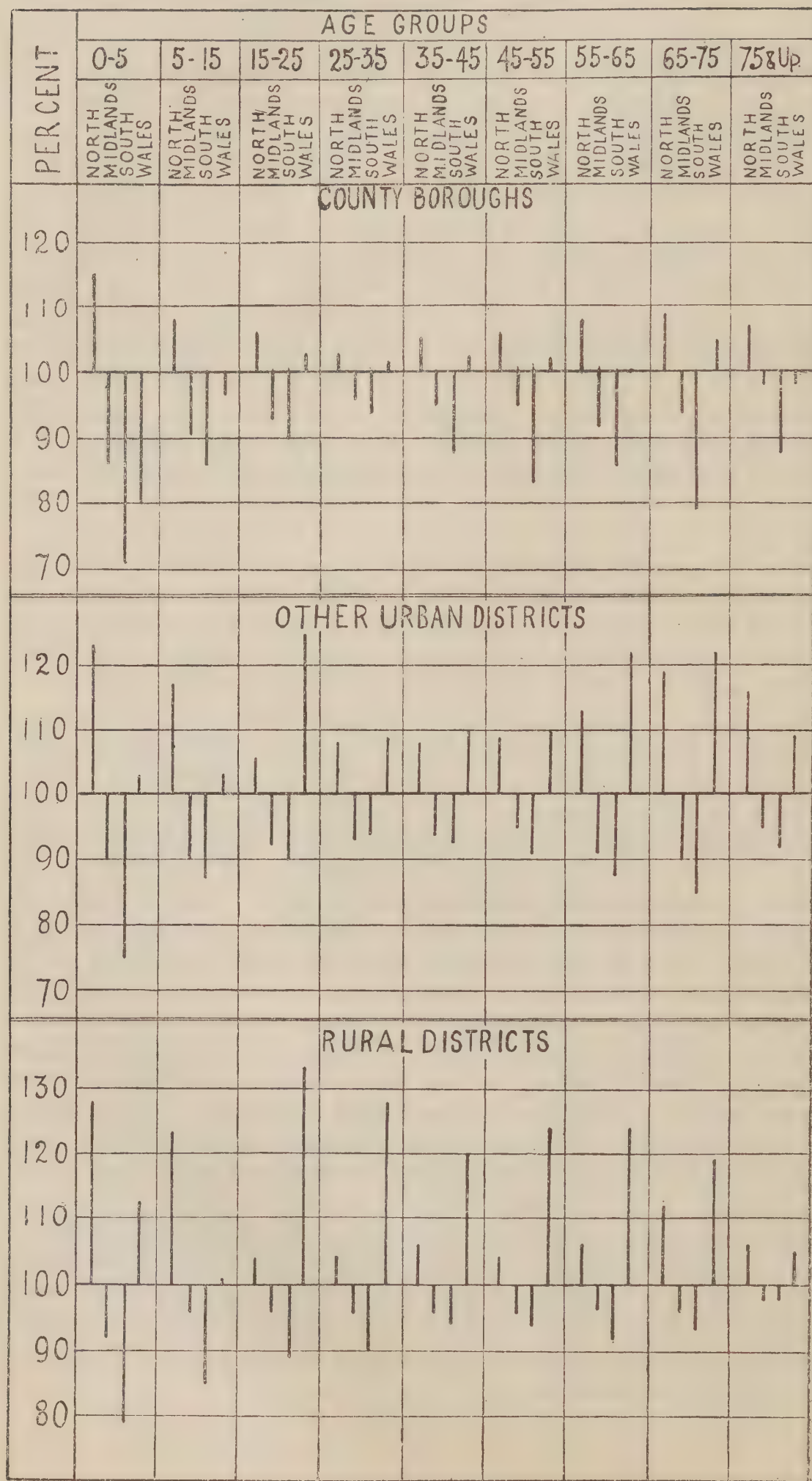
(See Table V.)

		Mortality per cent. of that in England and Wales.					Mortality per cent. of that in England and Wales in the same class of Area.			
		North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.
0-5	London	—	—	92	—	—	—	—	—	—
	County Boroughs ..	137	102	85	96	119	115	86	71	80
	Other Urban Districts ..	116	85	71	97	94	123	90	75	103
	Rural Districts ..	105	76	65	92	82	128	92	79	112
	All Areas	126	88	81	95	100	—	—	—	—
5-15	London	—	—	95	—	—	—	—	—	—
	County Boroughs ..	122	103	97	109	113	108	91	86	97
	Other Urban Districts ..	115	89	86	102	98	117	90	87	103
	Rural Districts ..	105	81	72	86	85	123	96	85	101
	All Areas	117	92	89	98	100	—	—	—	—
15-25	London	—	—	95	—	—	—	—	—	—
	County Boroughs ..	114	100	97	112	108	106	93	90	103
	Other Urban Districts ..	103	90	88	122	97	106	92	90	125
	Rural Districts ..	97	89	83	124	93	104	96	89	133
	All Areas	108	93	91	121	100	—	—	—	—
25-35	London	—	—	93	—	—	—	—	—	—
	County Boroughs ..	111	103	102	109	108	103	96	94	101
	Other Urban Districts ..	105	90	91	105	97	108	93	94	109
	Rural Districts ..	100	93	87	123	96	104	96	90	128
	All Areas	108	95	93	111	100	—	—	—	—
35-45	London	—	—	103	—	—	—	—	—	—
	County Boroughs ..	120	108	100	116	114	105	95	88	102
	Other Urban Districts ..	101	88	87	103	94	108	94	93	110
	Rural Districts ..	90	82	80	102	85	106	96	94	120
	All Areas	110	93	94	106	100	—	—	—	—
45-55	London	—	—	111	—	—	—	—	—	—
	County Boroughs ..	122	109	96	117	115	106	95	83	102
	Other Urban Districts ..	103	89	85	103	94	109	95	91	110
	Rural Districts ..	83	76	75	99	80	104	96	94	124
	All Areas	110	92	95	105	100	—	—	—	—
55-65	London	—	—	110	—	—	—	—	—	—
	County Boroughs ..	125	107	99	116	116	108	92	86	100
	Other Urban Districts ..	109	88	85	118	96	113	91	88	122
	Rural Districts ..	84	76	72	98	79	107	97	92	124
	All Areas	114	90	94	111	100	—	—	—	—
65-75	London	—	—	104	—	—	—	—	—	—
	County Boroughs ..	126	108	91	121	115	109	94	79	105
	Other Urban Districts ..	118	89	84	121	99	119	90	85	122
	Rural Districts ..	92	79	77	98	83	112	96	93	119
	All Areas	118	91	91	112	100	—	—	—	—
75-	London	—	—	102	—	—	—	—	—	—
	County Boroughs ..	119	110	98	110	112	107	98	88	98
	Other Urban Districts ..	115	94	92	108	99	116	95	92	109
	Rural Districts ..	95	88	88	94	90	106	98	98	105
	All Areas	113	96	95	102	100	—	—	—	—
All Ages Standardized.	London	—	—	101	—	—	—	—	—	—
	County Boroughs ..	125	106	95	110	115	109	93	82	96
	Other Urban Districts ..	112	89	84	108	97	116	92	87	112
	Rural Districts ..	95	81	76	98	84	112	95	90	116
	All Areas	116	92	91	105	100	—	—	—	—

ratios proves to be so nearly identical with that on similar lines in the Review for 1923 that the latter may be accepted as representing the distribution of mortality also in 1926. In both years, for instance, there is the same excess of mortality in the North, with maxima at 0-5 and 65-75, and applying to both large and small towns, but with a notable exception during middle life in favour of the rural districts, where the Northern rates are well below the general average (though above the rural average) and much lower than in Wales, the rural rates for which in early adult life are in great excess, higher indeed in 1926 than those for the Welsh towns, large or small. In this year the usual rule of increase of mortality with that of density is reversed for Wales at 15-25 and 25-35, rates being highest in the rural districts (and lowest at 15-25 in the county boroughs). In both years Welsh rural mortality starts with an advantage (over the general average) in early life, which is soon lost as age advances, while in the North of England the case is reversed, the rural rates being high in childhood and subsequently for the most part below average. In both years mortality is seen to vary more at 0-5 than at any higher age, with a maximum in the county boroughs of the North and a minimum in the rural districts of the South.

As the general features of the first part of Table XXV are so adequately represented by Diag. 1 of the Review for 1923, this has not been repeated, but in its place Diag. 2 has been prepared, in which the facts are viewed from a different angle, comparison being made for each rate with that for the same age not in England and Wales but in the same class of area in England and Wales. This substantially eliminates the effects of density, leaving the comparison one between populations of similar density in different parts of the country (the order North, Midlands, South, Wales applying throughout), so that what is brought out is the contrast between the geographical sections of the country under similar conditions of density. This is strikingly similar in all classes of area and at almost all ages, mortality in the North and in Wales being above average and that in the Midlands and especially the South below it, at all ages in all classes of area, with one exception—low rates in childhood and absence of excess at 55-65 and 75—for the Welsh county boroughs. There is no exception at any age in any class of area to the rule of excess for the North. This diagram also brings out the fact that variation of mortality with section of the country is greatest in early childhood and least in old age, just as variation with class of area was shown to be by Diag. 1 of the Review for 1922. But, as in that comparison so in this, variation is comparatively slight in early adult life (except for the Welsh rural excess), thereafter increasing to a later maximum (at a higher age for part of the country than for class of area) after which further increase of age brings rapid reduction of contrast as the maximum span of human life approaches.

Diagram 2. Mortality at different Ages in various Classes of Area and Geographical Sections of England and Wales per cent. of that at the same Age and in the same Class of Area in England and Wales as a whole.



CAUSES OF DEATH.

The causes of death of males and females at 18 groups of ages are stated in Table 17 for the whole country, for London, for county boroughs in the aggregate, for other urban districts in the aggregate, and for rural districts in the aggregate; and in Table 17A further detail of age is shown for all causes of significance at ages 0-5. In Table 18 deaths from each cause distinguished are tabulated by month of occurrence and by sex, but not by age. This table differs from all others in referring to date of occurrence and not of registration. So far as they relate to the whole country these tables include all deaths, but deaths of non-civilians are excluded from all tables relating to portions of the country (*see* page 1). The causes and ages of the latter are stated in Table 19 for the country as a whole. Table 17 includes the full International List of causes of death, as revised in 1920. Certain of the numbered items in it are subdivided, and where this occurs the letters (*a*), (*b*), &c., indicate subdivisions in international use, and numbers (1), (2), &c., subdivisions made without international agreement. All other abstracts of the causes of death are arranged in the form of the short list of causes adopted by the Registrar-General in consultation with the Ministry of Health for use during 1921-30. The relation of this list to the detailed and condensed International Lists, as revised by the International Commission which met for the purpose at Paris in 1920, is as follows:—

Short List of Registrar-General.							Corresponding Number.	
							Detailed Inter- national List.	Abridged Inter- national List.
1	Enteric fever	..	..	..	..	..	1	1
2	Small-pox	..	..	..	..	..	6	4
3	Measles	..	..	..	..	..	7	5
4	Scarlet fever	..	..	..	..	..	8	6
5	Whooping cough	..	..	..	..	..	9	7
6	Diphtheria	..	..	..	..	..	10	8
7	Influenza	..	..	..	..	..	11	9
8	Encephalitis lethargica	..	..	..	..	..	23	12 pt.
9	Meningococcal meningitis	..	..	..	..	..	24	12 pt.
10	Tuberculosis of respiratory system	..	..	..	..	..	31	13
11	Other tuberculous diseases	..	..	..	..	..	32-37	14 & 15
12	Cancer, malignant disease	..	..	..	..	..	43-49	16
13	Rheumatic fever	..	..	..	..	..	51	37 pt.
14	Diabetes	..	..	..	..	..	57	37 pt.
15	Cerebral hæmorrhage, &c.	..	..	..	..	..	74 & 75a	{ 18 pt. 37 pt.
16	Heart disease	..	..	..	..	..	87-90	19
17	Arterio-sclerosis	..	..	..	..	..	91b	37 pt.
18	Bronchitis	..	..	..	..	..	99	20 & 21
19	Pneumonia (all forms)	..	..	..	..	..	100 & 101	22 & 23 pt.
20	Other respiratory diseases	..	..	..	..	..	{ 97, 98 & 102-107 }	23 pt.

						Corresponding Number.	
Short List of Registrar-General— <i>contd.</i>						Detailed Inter- national List.	Abridged Inter- national List.
21	Ulcer of stomach or duodenum	..	..	..	..	111	24 pt.
22	Diarrhoea, &c. (under 2 years)	..	..	..	..	113	25
23	Appendicitis and typhlitis	..	..	..	..	117	26
24	Cirrhosis of liver	..	..	..	..	122	28
25	Acute and chronic nephritis	..	..	..	..	128 & 129	29
26	Puerperal sepsis	..	..	..	..	146	31
27	Other accidents and diseases of pregnancy and parturition	..	..	..	..	{ 143-145 & 147-150 }	32
28	Congenital debility and malformation, premature birth	..	..	..	..	{ 159-161 }	33
29	Suicide	..	..	..	..	165-174	36
30	Other deaths from violence	..	..	..	..	175-203	35
31	Other defined diseases	{ 2-5, 12-22, 25-30, 38-42, 50, 52-56, 58-73, 75b-86, 91a, 91c-96, 108-110, 112, 114-116, 118-121, 123-127, 130-142, 151-158, 162-164 }				{ 2, 3, 10, 11, 12 pt., 17, 18 pt., 24 pt., 25 bis, 27, 30, 34, & 37 pt. }	
32	Causes ill-defined or unknown	..	..	..	..	204 & 205	38

The contents of every heading in both the short and the detailed list now in use are defined in the Registrar-General's "Manual of the International List of Causes of Death" (1920 Revision),* which should be consulted in all cases where it is desired to ascertain the precise significance of any heading in the lists.

In Table 20 deaths of civilians are shown for different classes of area in various sections of the country, for urban and rural portions of administrative counties, and for county and metropolitan boroughs, arranged by sex, age, and the short list of causes as above. For other administrative areas of over 10,000 population in 1921 deaths of civilians are shown in Table 21, arranged by sex and short list of causes, but without distinction of age.

In addition to the above tables, which relate exclusively to the year 1926 (except Table 18, which deals with the twelve months Oct. 1925-Sept. 1926), Table 4 contains a statement of the number of deaths registered in each year 1916-26 from each cause distinguished in Table 17, so far as available, with distinction of sex but not of age; while Table 5 states the corresponding crude death-rates per million living for persons, males, and females, so far as these can be regarded as of any significance. Similar tables (Nos. 8 and 9) state the mortality during the same eleven years of infants under one year of age from the causes of chief importance at that age, but without distinction of sex.

1. **Enteric Fever.**—The deaths classified to this heading during 1926 numbered 367. Of these, 41, or 11 per cent., were returned as paratyphoid, as against only 6, or 0.25 per cent., in 1911, the first year for which the information is available.

* Copies may be obtained from H.M. Stationery Office. Price 2s. net.

The mortality corresponding to these deaths, 9 per million living, is the lowest yet recorded in this country. So recently as 1901 the rate was 155. A sudden fall immediately after the war (1919) has been maintained or increased ever since.

The distribution of this mortality throughout the country is outlined in Table XXVI. No section of the population here distinguished returns a rate as high as the average (16) for 1921.

Table XXVI.—Enteric Fever, 1926 : Mortality per Million Civilian Population.

Class of Area.	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	7	—	7
County Boroughs ..	9	7	10	11	8
Other Urban Districts	15	8	8	8	10
Rural Districts ..	14	14	6	7	11
All Areas	11	9	7	8	9

The maximum mortality in the rural districts in 1926 is a new feature of this table, the rural rate having been well below those both of the large and of the small towns in each year from 1911 to 1916. The London rate, which for the first time during the 16 years available for comparison exceeded the general average in 1925, has once more fallen below it, but the fall in London has not kept pace with that in the country generally, especially in the North, where the rate in 1926 for each class of area is little more than ten per cent. of that in 1911, whereas in England and Wales it is 13, and in London 22 per cent.

Table 23 shows that one previous year, 1922, recorded a lower prevalence than 1926, but as in that year the fatality of the cases notified was considerably higher (Table XXVIII) the death-rate was one third higher than that of 1926. Prevalence fell rapidly from 0·38 notified cases per 1,000 population in 1911, when the record commences, to 0·06 in 1922, since when decline has ceased.

Prevalence was higher in 1926 in the South of England than elsewhere, the minimal mortality of the South (Table XXVI) being due to its great advantage in fatality.

Table XXVII.—Enteric Fever, 1926 : Prevalence and Fatality.*

Class of Area.	Cases per 1,000,000 Population.					Deaths per 1,000 Cases notified.				
	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	71	—	71	—	—	95	—	95
County Boroughs ..	62	73	70	42	65	138	100	144	250	129
Other Urban Districts	79	48	130	57	76	186	168	63	145	136
Rural Districts ..	72	83	60	32	69	188	164	107	222	159
All Areas	69	66	84	47	70	164	142	89	181	134

* Excluding non-civilian cases and deaths.

The fatality-rates returned for this and other notifiable diseases from 1911 onwards are compared in Table XXVIII.

The enteric rate for 1926 is seen to be lower than for any other year except 1924. Those for scarlet fever and poliomyelitis in 1926 are the lowest of the series, and those for small-pox and diphtheria are much the same as in 1925, and lower than in any preceding year.

Table 7 records no high local mortality from enteric fever in any county or county borough. The highest death-rate for any county was 29 per million, or about three times the average, in Suffolk East, and the highest county borough rates were 37 in Wakefield and 35 in Southampton. The West Riding of Yorkshire, which returned the highest rate amongst the larger counties in 1921 and 1922, at the time of the Bolton-upon-Deane outbreak, and rates well above the county average during the intervening years, comes second in 1926 with a rate of 24.

Table XXVIII.—England and Wales : Fatality of certain Infectious Diseases (Deaths per 1,000 Notified Cases), 1911–26.*

Year.	1. Enteric Fever.	6. Small-pox.	8. Scarlet Fever.	10. Diphtheria.	21. Erysipelas.	22. Poliomyelitis.	24. Meningococcal Meningitis.
1911	174	78	18·1	103	39	?	?
1912	191	73	18·6	96	39	?	?
1913	182	87	16·1	88	35	283	1,089
1914	194	62	17·2	99	42	348	1,257
1915	197	144	18·2	109	45	333	623
1916	188	107	17·8	103	40	270	704
1917	203	429	15·0	103	42	468	692
1918	206	32	20·0	109	46	1,013	767
1919	160	82	14·7	90	41	294	732
1920	171	114	12·0	81	52	404	911
1921	158	16	9·5	72	55	314	1,007
1922	191	28	12·7	78	53	352	1,046
1923	140	3	11·6	68	50	185	944
1924	120	3	10·5	60	52	183	746
1925	139	2	10·8	58	57	370	876
1926	134	2	8·3	59	55	180	927

* The rates in this table are given with reserve, being in some respects unsatisfactory. For the years 1911–13 cases of disease among non-civilians have been excluded from the notification returns, but it has not been possible to distinguish their deaths; for 1914 both cases and deaths relate to the total population; while for subsequent years the figures relate exclusively to the civilian population.

The numbers of small-pox cases in some years are too small to yield significant rates, but their basis of fact can be inferred from Table 4, and the rates quoted serve to bring out the extremely mild type of disease prevalent in 1921–26. The rates for poliomyelitis include polioencephalitis, which was not distinguished in the notification returns until 1919. The extraordinary rise in 1918 is partly ascribable to certification of a number of deaths from the then “new disease,” encephalitis lethargica, as polioencephalitis, but mainly to a reduction in notifications unaccompanied by significant change in the number of deaths (*see* Report for 1918). The rates from this disease will be found to differ from some of those published in the Annual Reports of the Chief Medical Officer of the Ministry of Health, partly because polioencephalitis is included throughout and partly because special inquiries made by the Ministry in certain years have led to revision of the returns for those years, which is not embodied in Table XXVIII. The cases there referred to are similar for each year dealt with, being in all cases derived from the published notification returns. The latter source of discrepancy applies also to meningococcal meningitis, and in this case there is a possibility that some cases of posterior basal meningitis may not have been notified as cerebro-spinal fever though all such deaths are included in the table.

5. Malaria.—Deaths allocated to this cause numbered 65, 58 of the decedents being males. As this is the second year in which the number certified has conformed to the 50–70 customary for a number of years prior to 1917 (1906–16) it may probably be inferred that the increase of mortality occasioned by war conditions in that and subsequent years has now come to an end (Table 4).

6. Small-pox.—The deaths allocated to this cause numbered 18, the largest total since 1922, when there were 27 (28 in 1919 and 30 in 1920—Table 4). During the prevalence of the present mild type of this disease it is very difficult to determine the number of deaths for which it should be held responsible, and the figure quoted is probably overstated, that accepted by the Ministry of Health being 11. The number 18 is arrived at by application of the rule of tabulation long followed in this country. Under it all deaths on the certificates of which mention is made of small-pox are assumed to have been caused by it unless violence or certain other causes catalogued on page xxii of the "Manual" of the International List are simultaneously recorded. During 1926 only one death, of a male aged 58 suffering from cancer of the stomach, was excluded from the small-pox heading under this rule, so the significance of the figure quoted is that 18 deaths occurred of persons certified as suffering at the time of death from small-pox, in addition to one other death assigned to cancer.

The present rule, which assigns such high preference to small-pox over other concurrent causes, is very commonly followed throughout the world, and may be taken to have worked well, on the whole, so long as the fatality of small-pox remained high, so that the probability of any death during an attack having been due to that attack was great. It was in these circumstances that the rule was framed, and attained its present long standing and widespread acceptance. But its suitability under present conditions is open to question. With over 10,000 cases in a year (Table 26) there must frequently be many persons passing through an attack of mild small-pox at the same time, representing an appreciable population exposed to the risk of death from other causes. As recent developments have greatly increased their number and decreased their risk of death from small-pox the old convention which assumes any deaths occurring amongst them (with few exceptions) to be due to this cause is less valid than formerly.

In present circumstances it is preferable that every such case should be judged on its merits by the medical attendant, who alone is in a position to decide whether death was actually due to the small-pox affecting his patient at the time or to some other cause. It was with a view to substitution of reliance on the certifier's opinions regarding particular deaths for use of general rules, such as that quoted, applying indiscriminately to all deaths, that the new form of medical certificate introduced in 1927 was devised. Time is, however, required for the significance of this change to be universally appreciated, and until it can be assumed that statements entered on this form may be taken at their face value, use of the rules set forth in the Manual must continue.

Of the 18 deaths, 13, or 72 per cent. occurred in the county of Durham (including county boroughs), but in this county, as may be seen from Table 28, there were also 6,646 cases notified,

out of 10,146 in England and Wales (Table 26), or 66 per cent. of the total. There were no Durham deaths in 1925, but 1,138 cases.

7. **Measles.**—The deaths registered from this cause numbered 3,483, corresponding to a mortality of 89 per million population. This is a lower rate than that for any previous year except 1921, which was only 59. At ages under 15 years, which, owing to the decreasing proportion of children in the population, afford a better basis for comparison than all ages jointly, the position is the same. Table 6 shows that during the nineteenth century the rate recorded for each quinquennium was more than three times that for 1926.

Although Table 5 shows that the mortality of males from measles consistently exceeds that of females, this excess is confined to very early childhood. Tables 17 and 17*a* show that deaths of males were in considerable excess during the first three years of life, but that at higher ages there were 399 deaths of females and only 367 of males. This reversal of the sex ratio at 2—3 years of age is a very constant experience with measles.

The distribution throughout the country of mortality from measles is stated in Table XXIX in the form of death-rates per 100,000 living at ages 0–5. Deaths at these ages in 1926 formed 89 per cent. of the total, and statement in this form prevents the comparison being prejudiced by varying proportions of children in the populations compared.

Table XXIX.—Measles, 1926 : Mortality per 100,000 Living at Ages under 5 Years.

	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	219	—	219
County Boroughs ..	132	78	58	31	103
Other Urban Districts	72	71	76	40	68
Rural Districts ..	36	38	29	38	35
All Areas	99	64	130	38	91

The outstanding feature of this Table is the high mortality in London, which was, as in 1922 and 1924, more than double that for England and Wales. This has been sufficient to raise the mortality of the South to the highest place amongst the sections of the country, though when comparison is restricted to the same class of area in each case, its position is, in accordance with the usual experience of other years, relatively much more favourable. The regular increase from rural districts to county boroughs is common to the experience of each of the 16 years, 1911–26, for which the information is available.

A report recently issued by the Medical Research Council (Special Report Series, No. 120) on the relationship between housing conditions (particularly in Glasgow) and the incidence and fatality of measles, draws attention to the greater risk of early infection (*i.e.*, at the ages at which fatality is greatest) under conditions of housing in blocks of tenement dwellings, the conclusion being arrived at that in these conditions the disease mainly affects children under school age, but that where the single-entry type of house prevails ages 5–10 are chiefly affected. Fatality at 0–2 is shown to be probably 10–20 times greater than at 5–10, and even at 3–4 about 4 times greater. These figures emphasize the well recognized importance of protecting young children from measles until the age is reached at which the danger entailed by infection is comparatively small, and at once suggest the interest of ascertaining to what extent this postponement is effected in different sections of our population. No data as to age incidence of attack are available, but it may be assumed in view of the greater fatality in infancy that where attacks occur earliest in life the proportion of deaths during the first two years of life will be greatest. These proportions may be ascertained from Table 20, and for 1926 are stated in the following table :—

Table XXX.—Age Distribution of Mortality from Measles, 1926.
Deaths at 0-1, 1-2, and over 2 years, per cent. of Total.

		North.	Midlands.	South.	Wales.	England and Wales.
London	{ 0-1	—	—	24	—	24
	{ 1-2	—	—	46	—	46
	{ 2—	—	—	30	—	30
County Boroughs..	{ 0-1	25	22	23	29	24
	{ 1-2	42	44	30	53	42
	{ 2—	33	34	47	18	34
Other Urban Dis- tricts	{ 0-1	23	21	18	20	21
	{ 1-2	40	36	25	39	35
	{ 2—	37	43	57	41	44
Rural Districts ..	{ 0-1	19	16	12	26	17
	{ 1-2	38	32	20	26	30
	{ 2—	43	52	68	48	53
All Areas	{ 0-1	24	21	23	24	23
	{ 1-2	41	38	40	37	40
	{ 2—	35	41	37	39	37

Almost two-thirds of the deaths occurred during the first and second years of life, especially the latter, and this proportion increases regularly, for each section of the country, from a rural

minimum to a county borough or (in the South) London maximum. The similar increase of mortality with urbanization (Table XXIX) is much greater in degree, but is interrupted for the South of England by excess for the smaller towns over the county boroughs, and does not apply to Wales at all. But the constancy with which in all sections of England a high proportion of early deaths in the towns is associated with relatively high mortality supports the contention in the paper quoted that early infection is an important factor in causing the high mortality of densely populated areas.

It may also be noticed in Table XXX that the proportion of early deaths (under two years) declines from the North to the South of England for each class of area compared. This distribution is not so evident for mortality in Table XXIX, but, apart from the great excess in London, the general tendency is towards decline from North to South and in other recent years this has generally been much more obvious than in 1926. In England as well as Scotland, therefore, housing and other sanitary advantages appear to play a part in controlling measles mortality by affording greater protection from infection to very young children.

In all sections of the country alike, however, it may be noted that the degree of excess in the cities is much greater for mortality than for proportion of early deaths, so it would appear that early infection may not be the only cause of urban mortality excess. Probably average fatality is less in the country, age for age, than in the town. This assumption can be made with some confidence, as few children escape infection with measles. This being so, mortality is not affected by the incidence of the disease, which may be taken as constant at close on 100 per cent. everywhere, but only by the sufferer's age and by the severity of the infection in relation to the resistance of the patient (as influenced by such factors as previous health, hygiene, and nursing). Unless, therefore, the type of infection is more severe in the towns, a considerable share of the rural advantage in mortality must be due to rural environment, if this advantage can be assumed to be greater than higher age at onset will explain.

The relationship of age at death to urbanization indicated by Table XXX is, of course, what might be expected, as the channels of infection must be much more numerous and less avoidable in town life, where the disease is frequently present to some extent, than in the country, where it is rather an occasional visitor, from which there is a much greater chance of screening infant life. But the fact that the expected is found to happen in the case of measles makes it all the more difficult to explain the fact that the converse and apparently not to be expected relationship of age at death to urbanization consistently applies (Table XXXIV) year after year in the apparently similar case of whooping cough.

Table 7 shows that the London death-rate at all ages was the highest amongst the administrative counties. It was exceeded by those of seven out of the 82 county boroughs, the excess for the highest rate of all (Carlisle, 321) being 58 per cent.

The London excess of 141 per cent. over the general average falls into its place in a remarkably regular series for such ratios during the past six years, previous to which, as the effects of the war had prevented local estimates of child population, the rates shown in this series of tables were much less comparable. From 1922 on, the London rate has borne the following percentage ratio to that for England and Wales—1922, 244 ; 1923, 64 ; 1924, 238 ; 1925, 56 ; 1926, 241. Thus during these five years the London rate has been alternately above and below the average by amounts which have remained curiously constant. It will, of course, be noted that this two yearly excess corresponds with the well known periodicity of measles mortality with a maximum approximately every second year. But the London excesses in years of local prevalence have been much greater than their opposites in the alternating years, and for the five years 1922-26 as a whole a London rate of 207 per 100,000 living at 0-5 compares with an England and Wales rate of 129; or if, to avoid including more years of high than of low London mortality in the sequence of alternations, we deal with 1923-26 only, a London rate of 168 compares with 122 for England and Wales, the London excess being 60 per cent. for the five years, and 38 for the four. At the time of writing it may be added that the sequence bids fair to be maintained for 1927 and 1928, London measles mortality having been comparatively low in 1927, and threatening to be high in 1928.

Table 18 shows that more deaths occurred daily during March than any other month, the daily mean being 22·4 for March, and 19·5 for April, which came next. For 1921-25 Diag. 4 of the Review for 1925 shows a very definite maximum in April, with March coming next.

8. **Scarlet Fever.**—The deaths allocated to this disease during 1926 number 677. They correspond to a rate of 17 per million total population at all ages, and of 57 per million at ages under 15 years, both of these being lower than for any previous year (Table 6), but the advantage of 1926 over 1917, the year of lowest previous mortality, is much less at ages 0-15, (allowing for decrease of child population) than at all ages.

Table 6 also shows that for eleven years in succession each of these rates has been much lower than any recorded previous to this period (*i.e.*, to 1916), the mortality being now trifling compared with that prevalent a generation ago. The stages of the decline in scarlet fever mortality, from its high level during 1861-70 to 1926, may be traced in the following statement

(continued from the Review for 1924) relating to ages 0–5, at which 45 per cent. of the deaths occurred in 1926. Taking the rate at this age during 1861–70 as 1,000 in each case those for later periods compare as follows :—

	Males.	Females.	Both Sexes.
1861–1870	1,000	1,000	1,000
1871–1880	757	752	755
1881–1890	359	359	359
1891–1900	179	184	182
1901–1910	123	122	123
1911–1920	52	54	53
1926	20	19	19

Table XXVIII shows that the decrease in fatality of cases of this disease, which has been observed for many years, still continues, the rate of 8·3 deaths per 1,000 notified cases being the lowest in the table. Prevalence also was lower in 1926 than in any other year since 1918 (Table 23).

These changes have now resulted in an official recommendation * that some of the hospital accommodation hitherto reserved for scarlet fever patients might be better used for other serious infections, such as pneumonia and measles ; and in a reduction by the Metropolitan Asylums Board of the proportion of beds allotted to scarlet fever.

Table XXXI.—Scarlet Fever, 1926 : Mortality per Million Living at Ages under 15 years.

	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	66	—	66
County Boroughs ..	71	50	42	6	58
Other Urban Districts	85	45	49	49	59
Rural Districts ..	83	31	24	58	45
All Areas	77	43	51	43	57

Table XXXI shows that, with one slight exception in the case of the smaller towns, the mortality of each type of area compared decreased from the North to the South of England, in accordance with the general experience of recent years. The other and still more constant rule of distribution—that mortality increases with urbanization—has for the first time in sixteen years been reversed, by a higher rate for the smaller towns than for the county boroughs, the only previous exception to its application having been equality of the rates for the small towns and the rural districts in 1918.

* Reports on Public Health and Medical Subjects (Ministry of Health) No. 35, "Some administrative aspects of Scarlet Fever," 1927.

Table XXXII.—Scarlet Fever, 1926 : Prevalence and Fatality.

	Cases per 10,000 Population aged 0-15 years.					Deaths per 1,000 Cases notified.				
	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	107	—	107	—	—	7	—	7
County Boroughs	89	79	90	44	84	9	7	6	3	8
Other Urban Districts	82	82	70	56	77	11	7	8	11	9
Rural Districts	87	70	53	58	69	12	6	7	17	9
All Areas	87	78	86	55	81	10	7	7	12	8

Table XXXII shows that, as in several other recent years (1921, 1922, 1924) prevalence was higher in London than for any of the other sections of our population compared in the table. Fatality, on the other hand, was below average in London. It was highest in the rural districts of Wales, where the rate of 17 deaths per 1,000 cases was higher than any corresponding rate since those of 20 for the rural districts of the North in 1920, and of 17 for London in 1922.

Table 7 shows that amongst counties with over 100,000 population mortality was highest, at 49 deaths per million population (as compared with an average of 17 for all counties), in Durham, Northants (42) coming next. The rate for Anglesey, 343, is quite exceptional. Of the 18 deaths, 6 occurred in Holyhead U.D., yielding a rate of 476, and 12 in Valley R.D., the rate for this district being no less than 1,012 (higher than that for England and Wales in 1861-70). This mortality was due much more to high fatality than to high prevalence, the former being 15 and 13 times the general average in Valley and Holyhead respectively, and the latter 4 and 2 times.

The highest rates amongst the county boroughs (average 18), were for Carlisle (71), Rotherham (57), Stockport (56), and Gateshead (55). That for Stoke-on-Trent, which has been notably high in each year from 1919 onwards, is still almost double the average at 33.

9. Whooping Cough.—The deaths allocated to this heading numbered 4,118, 1,877 of males and 2,241 of females. The excess for females is shown by Table 4 to be a constant feature of this disease, and tends to increase with age. The mortality was 105 per million total population at all ages, and 408 at ages under 15 years. These rates are about one-third lower than those for 1925, and are, indeed, amongst the lowest yet recorded (Table 6). Taking that for children as the more accurate measure in a population containing a rapidly decreasing proportion of children, only three previous years have returned a lower rate than 1926—1919, 1923, and 1924. It is less than one-third of that for 1886-90 or for any previous quinquennium.

The distribution of mortality from this cause is indicated in Table XXXIII.

Table XXXIII.—Whooping Cough, 1926 : Mortality per 100,000 Living at Ages under 5 Years.

	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	56	—	56
County Boroughs ..	161	114	67	109	134
Other Urban Districts	179	101	61	114	122
Rural Districts ..	172	104	73	115	114
All Areas	168	106	62	113	117

It will be seen that extra-metropolitan mortality increased regularly with urbanization, as it has done in each year from 1911 onwards, except 1915 and 1919. For each class of area also, considered separately, decrease in mortality is, as usual, regular from North to South. The last exception to this rule occurred in 1922.

Table XXXIV.—Whooping Cough, 1926 : Deaths under One Year of Age per cent. of those at All Ages.

	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	44	—	44
County Boroughs ..	42	49	59	38	45
Other Urban Districts	44	47	44	50	45
Rural Districts ..	52	53	55	60	54
All Areas.. ..	44	49	48	50	47

Table XXXIV shows that, as usual, the proportion of total deaths occurring in the first year of life declined with increasing urbanization, though equality of the county borough and urban district proportions furnishes the first instance in 16 years (1911–1926) in which this proportion has not been lowest of all in the county boroughs as well as highest of all in the rural districts, taken as a whole. The same rule applies generally, though with frequent exceptions, to each section of the country. In 1926 it holds good for the North and Wales, but not for the Midlands and South. This proportion was, as usual, higher for males (48·3) than for females (45·2).

In seven out of the past 16 years (1911–26) the proportion of these early deaths has been higher in London than in the county boroughs, but in none of them has it been lower in the smaller towns than in the county boroughs, or in the rural districts than in the smaller towns.

The highest death-rates in administrative counties are shown by Table 7 to have been 259 in Northumberland and 240 in Durham. The former was below average in 1925, but Durham has returned high rates for several years, and in 1923 its rate was

highest amongst the counties. Similar figures for the county boroughs are Middlesbrough 427 and Oldham 329. Middlesbrough returned the highest county borough rate also in 1924, but in 1925 its mortality was below the county borough average.

10. Diphtheria.—The fact that from 1921 onwards this heading excludes “croup,” a term now seldom met with, and shown by Table LXIV and its predecessors for the most part no longer to signify diphtheria, makes little difference to the number of deaths included, as in 1920, the last year for which these deaths were distinguished, they totalled 18, as against 5,648 from diphtheria.

The 2,994 deaths from diphtheria in 1926 include 1,421 of males and 1,573 of females. This excess for females is a very constant feature of the returns, applying to each year since the disease was first distinguished save one only—1922. The crude death-rate, on the other hand, is seen from Table 5 to be very consistently in excess for males, slight excess for females in 1926 being the only exception to this rule during the last eleven years. In reality, however, the female sex suffers most from this disease, as shown by a constant excess, for females, of standardized mortality, varying from 5 to 14 per cent. during the six decades 1861–70 to 1911–20.

Table XXXV.—Diphtheria, 1926 : Mortality per 100,000 living at Ages under 15 Years.

	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	46	—	46
County Boroughs ..	30	36	52	23	34
Other Urban Districts	19	26	20	32	23
Rural Districts ..	21	19	10	20	17
All Areas	25	27	34	27	28

The history of diphtheria mortality is best expressed by the death-rate from diphtheria and croup at ages under 15 in Table 6, as during last century much diphtheria was evidently returned as croup, and the larger proportional child population in itself tended to produce a higher crude death-rate. For this reason the all ages rate in this table has been falling faster than that at 0–15, as may be seen from the fact that the former rate has been halved since 1916, and the latter since 1906. This (0–15) rate has increased for the second time from the minimum attained in 1924 as the result of four consecutive falls, but it is still only about one-fifth of the maximum rates during the years 1856–65, and little more than one-fourth of that marking the secondary peak of 1893.

The most notable feature of Table XXXV is once more the high rate for London, though this is no longer, as in the seven

preceding years, the highest in the table, being exceeded by that for the county boroughs of the south. The London rate is no longer, as in each of the years 1922-24, double that for England and Wales, though an excess of 64 per cent. remains. It is only since the war that this large excess for London has developed, though a similar experience is recorded during 1893-97, in each of which five years the London death-rate was at least double that of England and Wales. The rates in the table tend generally to increase from North to South, and from the rural districts to the largest towns.

Table XXXVI shows the great excess of mortality in London to be due entirely to greater prevalence, the proportion of notified cases being 133 per cent. in excess of the average. If it were not that fatality was lower than average in London (by 32 per cent.) the excess of London mortality would have been much greater. The London fatality rate is, indeed, the lowest in Table XXXVI, as it was also in 1925. Specially low fatality has accompanied the recent high prevalence of diphtheria in London, but rapid reduction of this rate has been a feature of the recent history of the disease in England and Wales generally, the average rate falling from 109 in 1918 (a higher rate than before the war) to 60 in 1924, 58 in 1925, and 59 in 1926 (Table XXVIII). During this period prevalence has remained much the same as before the war. The excess of prevalence in the South over the North and of fatality in the North over the South in Table XXXVI conform to a rule to which there has been no exception during the years, 1911-13 and 1918-26, for which this comparison can be made. This experience, repeated year after year, suggests a varying standard of diagnosis, cases similar to the milder of those notified as diphtheria in the South not being so regarded in the North.

This surmise, frequently made also in previous reports, is confirmed by an examination of the facts for London in the Report of the Chief Medical Officer of the Ministry of Health for 1926, which leads him to suggest that the high prevalence rate of the disease in London is due to inclusion amongst notifications of milder cases in London than elsewhere, including cases notified merely on bacteriological evidence. But while this difference in standard of diagnosis can explain the high prevalence and low fatality experienced in London, it cannot explain its high mortality, unless, indeed, we assume that many deaths of types ascribed elsewhere to other causes are considered in London to be due to diphtheria. This, however, would imply a scarcely credible difference in standard regarding fatal cases of disease which is not to be inferred from the probable existence of such a difference applying to mild illnesses.

The recent history of diphtheria prevalence in London may be read in Table 23, which shows that while the rate for England and Wales has decreased from 1.50 cases per 1,000 population in 1916 to 1.31 in 1926, or by 13 per cent., that for London increased from 2.06 to 2.96 or by 44 per cent., the London excess growing

during the same period from 37 to 126 per cent. Table 28 shows that prevalence was greatest in the metropolitan borough of Bermondsey, which returned the highest rate in 1922 and 1923, and came amongst the first three also in 1924 and 1925. Generally speaking, the rates are highest in south-east London.

Table XXXVI shows how far variation in mortality has been due to variation in prevalence and in fatality respectively.

Table XXXVI.—Diphtheria, 1926 : Prevalence and Fatality.

	Cases per 10,000 Population aged 0-15 years.					Deaths per 1,000 Cases notified.				
	North.	Midlands.	South.	Wales.	England and Wales.	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	119	—	119	—	—	40	—	40
County Boroughs	48	63	69	40	54	67	61	76	63	66
Other Urban Districts	25	48	37	52	39	81	56	56	64	63
Rural Districts	26	29	22	34	27	89	72	52	65	71
All Areas	37	48	74	44	51	72	61	47	64	59

In all cases, with one slight exception in the North, prevalence as usual increased greatly with urbanization in all parts of England. The fatality rate for the country at large, 5·9 per cent., is almost the lowest in Table XXVIII, which covers the whole of the period for which this comparison can be made.

Table 7 shows that amongst counties with at least 100,000 population the civilian death-rate for London, 119 per million, was higher than any other in England, being exceeded only by that for Carmarthen, 142.

The highest rates for the county boroughs are those of Portsmouth, 285, Nottingham, 257, and Walsall, 215. The latter returned a higher rate than any other county borough in both 1924 and 1925. The excess mortality in all three cases was due to high rates both of prevalence and of fatality, but of the three, Portsmouth returned much the highest prevalence and lowest fatality (cf. London).

11. Influenza.—The deaths assigned to this cause numbered 8,936—4,540 of males and 4,396 of females—yielding a mortality of 229 per million persons living. This rate compares as follows with the years of highest mortality since the commencement of our continuous series of records in 1847. These years, with the mortality per million population recorded in each, were :—

1848	..	..	..	459
1891	..	..	..	574
1892	..	..	..	533
1900	..	..	..	504
1918	..	..	..	3,078
1919	..	..	..	1,181
1922	..	..	..	563
1924	..	..	..	489

Table 18 shows that deaths were most numerous in March and April, when 3,216 occurred out of 8,936 in the year, or 36 per cent. of the whole.

The age distribution of influenza mortality, which underwent a sudden and remarkable change at the outset of the great epidemic of 1918, has since then reverted in great measure to its previous type, but even in 1926 the proportions of deaths at ages under 35 remain higher than in 1890–1917, and those above 55 lower, with little change for the proportion in middle life, 35–55, which has remained almost constant throughout.

The distribution of influenza mortality throughout the country is indicated in Table XXXVII.

Table XXXVII.—Influenza, 1926 : Civilian Mortality per Million Living at All Ages.

	North.	Mid-lands.	South.	Wales.	England and Wales.
London	—	—	175	—	175
County Boroughs ..	255	214	246	207	239
Other Urban Districts ..	264	189	198	274	224
Rural Districts	267	255	245	246	254
All Areas.. .. .	260	215	203	251	230

The fact that, as also in each of the two preceding years, the lowest rate in the table is that for London, while the two highest are those for the urban districts of Wales and the rural districts of the North, suggests that many of these deaths might have been more appropriately ascribed to other causes.

In each of the six years which can now be compared in this respect, mortality from attacks with pneumonic complications has been in considerable excess for males and that with other pulmonary and without stated complications in some excess for females. Of the deaths in 1926, 42 per cent. were stated to have been associated with pneumonic, and 19 per cent. with other pulmonary, complications.

22. Acute Poliomyelitis.—Deaths allocated to this cause numbered 235, a figure exceeded only once (1918, 237) since these deaths were first distinguished in 1911. During these 16 years the yearly deaths have varied only from 119 in 1923 to 237 in 1918. The only other epidemic disease displaying comparable constancy in Table 4 is erysipelas. But the number in 1926 is no less than 51 per cent. in excess of that in 1925. This is the greatest increase yet recorded for any single year, that of 41 per cent. in 1918 coming next.

These deaths are almost entirely of children, 80 per cent. in 1926 occurring before 20 years of age, and only 3 per cent. after

45. Some of these deaths in later life are attributed to consequences of paralysis caused by an acute attack in childhood, so the incidence of the disease is still more exclusively confined to childhood than the figures quoted would indicate.

The number of cases notified increased much more than the deaths in 1926—from 422 in 1925 to 1,296, or by 207 per cent. During the preceding eleven years this number had varied between 329 in 1920 and 860 in 1924, so the prevalence in 1926 was much higher than any noted before. In association with this disproportionate increase of notifications the case mortality fell from 370 per 1,000 in 1925 to 180 (Table XXVIII), but fatality has been singularly variable for this disease, the severity of the type apparently changing abruptly and capriciously from year to year. Thus in 1918 a decrease in notifications (of poliomyelitis excluding polioencephalitis) was accompanied by an increase in deaths, which for that year slightly exceeded the cases notified; in 1919 notifications more than doubled, but deaths decreased by 23 per cent.; in 1923 notifications increased by 67 but the deaths fell by 13 per cent. and in 1925 notifications fell by 51 per cent. but the number of deaths was almost unchanged. The effect of these independent fluctuations of cases and deaths upon the fatality-rate is registered in Table XXVIII. While the yearly deaths vary but little, the yearly notifications vary much, and independently.

Table 18 shows that the deaths in 1926 conformed to the type of seasonal distribution depicted in Diag. 4 of last year's Review for 1921–25—a strongly pronounced autumnal incidence, with an acute peak in October. Table 24 shows the chief prevalence at the same time of year, but with two distinct secondary peaks, the first in September, and the second, six weeks later, in late October. The five yearly average, however, (1921–25), exhibits a very acute peak in September, or a month earlier than that for deaths. Excess of prevalence is far greater at this time of year than excess of deaths, so it would appear that the infection is mildest when most widespread, unless indeed the facts are to be explained by increased recognition of cases of the disease at the time of year when it is known to be most likely to occur. This hypothesis is perhaps supported by the fact that the same seasonal relationship of notifications to deaths is very pronounced also for encephalitis lethargica, the maximum for both being in May. For there is evidence that the milder cases of this disease are often overlooked, its characteristic after-results being met with in persons in whom the early stages of the disease have never been recognized.

23. Encephalitis Lethargica.—For the third year in succession mortality from this cause has practically maintained the till then unprecedented level suddenly reached in 1924 (Table 5). But the cases notified were less than half those in 1924, so the fatality per 1,000 notifications, which rose from 279 in 1924 to 521 in 1925,

further increased to 584 in 1926. This increase represents a reversion to the experience of the first five years, 1919–23, of our knowledge of this disease, fatality in those years having varied between 496 in 1921 and 747 in 1922, when the number of notifications suddenly fell (from 1,470 in 1921 to 454). Deaths, in fact, have varied much less from year to year than notifications, and fatality has tended to vary inversely with prevalence.

As in the five preceding years, with which alone comparison can be made, mortality in 1926 was widely spread over the greater part of life except old age. The numbers of deaths recorded in Table 17 yield the following death-rates at varying ages—0–5, 41 per million; 5–15, 22; 15–25, 27; 25–35, 28; 35–45, 33; 45–55, 45; 55–65, 56; 65–75, 46; and 75 and upwards, 15. Young children and elderly adults accordingly suffered most in 1926 as in 1921–25, whilst the aged appear very largely to have escaped. This age distribution of mortality has so far been remarkably constant from year to year, mortality for each sex in each year falling heavily from 0–5 to 5–15, after which it gradually rises again to a higher maximum in later life, generally at 55–65, and then becomes quite trifling in old age.

Commencing with 1921, when definite information as to the ages of the population succeeds the fog of war, and dealing with the first three years of low mortality (1921–23) jointly, no exception to this rule of age distribution has yet to be noted for either sex. In each of these four periods (1924–26 singly and 1921–23 jointly) the highest rate for males and in two of them that for females was at 55–65, for females in 1921–23 it was the same at 0–5, and in 1924 highest at 0–5. For each sex in each period the rate at 5–15 has been about or little more than half that at 0–5, which has been about equal for each sex. But for females the maximum in later life has been little greater than the rate at 0–5, while for males it has been much greater; this late maximum being always, so far, in considerable excess for males.

The distribution throughout the country of mortality from this cause is stated in Table XXXVIII. Apart from comparatively low rates for London and for Wales this was on the whole very uniform.

Table 18 shows that the monthly deaths were most numerous in January (133) and April (131). Although the January total is highest, it is very slightly exceeded by that for April when allowance is made for the difference in length of the two months. But the fact that the rate for January practically equals that for April shows that the shifting of maximum mortality from January (1921) to later months (March in 1922, April 1923, May 1924 and 1925) noted in previous Reviews has now been replaced by a reversion towards the earlier distribution. This applies to notifications also, which correspond with the deaths in furnishing January and April maxima (Table 24), whereas in 1924 and 1925 their number was greatest in May.

Table XXXVIII.—Encephalitis Lethargica, 1926: Civilian Mortality per Million Living at All Ages.

	North.	Midlands.	South.	Wales.	England and Wales.
London	—	—	20	—	20
County Boroughs..	39	37	40	25	38
Other Urban Districts.	42	30	29	25	33
Rural Districts ..	38	36	40	26	36
All Areas	40	34	28	25	34

24. **Meningococcal Meningitis.**—Mortality from this cause, first distinguished in 1911, varied only between 9 and 11 per million living during 1911–14, and then suddenly increased to 45 in 1915. After that it gradually fell to 11 in 1921, and since then has varied only from 7 to 9, its rate in 1926, so that the level of 15 years ago seems to have been definitely restored, or rather somewhat improved upon, during the last six years.

31–37. **Tuberculosis.**—The deaths assigned to tuberculous affections in the aggregate number 37,525—20,669 of males and 16,856 of females—2,862 fewer than those so classified in the previous year. These figures are smaller than any previously recorded in our history, notwithstanding the increase of population by 156 per cent. since 1838, the first complete year of registration. In that year 59,025 deaths (27,935 of males and 31,090 of females) were assigned to “consumption” as against 30,108 (16,773 of males and 13,335 of females) to respiratory tuberculosis in 1926. The significance of either figure may of course be called in question, but such criticism cannot affect the fact that fewer deaths were assigned to tuberculosis in 1926 than in any previous year.

The reduction of 2,862 in total deaths implies a fall in the standardized death-rate from 1,017 per million in 1925 to 942, or by 7 per cent. This is the largest reduction noted since 1919 and 1920, when exceptional falls were due to inflation of the rates for 1918 and 1919 by influenza. Apart from these years the fall in 1926 has been exceeded only three times during the present century, in 1901, 1905, and 1912. During this period, 1901–1926, the standardized mortality has fallen by 48 per cent. The crude mortality, which in the case of this disease is little affected by standardization (Table XL), amounted to 961 per million, or a little more than the standardized. A small reduction of the crude rate for males was partially counterbalanced by a trifling increase on standardization for females. The proportion of the total crude death-rate due to this cause has decreased from 8·5 per cent. in 1925 to 8·3. If the standardized rates are considered, the proportion of our total mortality for which tuberculosis was responsible in 1926 is increased to 9·3 per cent. The standardized

mortality of 942 per million population (Table XL) is for the eighth year in succession the lowest yet recorded, each year since 1918, when the temporary rise associated with the war and the great epidemic of influenza reached its highest point, having returned a lower rate than its predecessor.

But of these eight years 1919, like 1918, was affected by the influenza epidemic, so it is only the last seven, 1920–26 inclusive, which can fairly be compared. In them the standardized mortality has fallen continuously from 1,129 in 1920 to 942 in 1926, a total reduction of 16·6 per cent. in six years (16·4 for males and 16·7 for females), most of which occurred in 1923 and 1926.

The fall in tuberculosis mortality during these seven years is traced in Table XXXIX, in which also the movement which has occurred is compared with that to be expected on the assumption of continuance of decline at the same rate as during the years 1866–1914, when, as discussed in the Review for 1921, the rate of progress recorded was remarkably constant. This was interrupted in 1915 by the commencement of a rise, presumably attributable to war conditions, which culminated in 1917, and had been replaced by decline during the first half of 1918, when, as pointed out in the Report for 1919, a still greater increase was superimposed by the great influenza epidemic during the last two quarters of 1918 and the first quarter of 1919. After this, as Table XXXIX shows, the rate quickly reached a level little in excess of that predictable from the 1866–1914 curve, to which it may be seen that the rates for both sexes have approximated fairly closely since 1919, the chief excess, of 11 per cent. for females in 1924 and 1925, being reduced in 1926 to 6 per cent., as for males.

Table XXXIX. England and Wales. Mortality from Tuberculosis in each Year, 1920–26.

Standardized Rates per Million and comparison of these with those predictable on the assumption of continuance of fall since 1866–1914 at the same rate as during that Period (see Review for 1921, Diag. 4).

	Recorded Mortality (Standardized).						Mortality calculated by Prolongation of the Curve of decline during 1866–1914.						Recorded Mortality per cent. of calculated.					
	All Forms.			Respiratory.			All Forms.			Respiratory.			All Forms.			Respiratory.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
1920	1,266	1,007	1,129	958	734	840	1,264	955	1,101	991	693	833	100	105	103	97	106	101
1921	1,233	1,011	1,117	944	757	845	1,221	927	1,065	970	681	816	101	109	105	97	111	104
1922	1,241	985	1,107	963	745	848	1,177	899	1,029	949	670	801	105	110	108	101	111	108
1923	1,164	942	1,049	900	707	798	1,134	871	994	929	660	785	103	108	106	97	107	102
1924	1,156	934	1,039	904	708	801	1,090	844	958	909	651	771	106	111	108	99	109	104
1925	1,143	904	1,017	895	691	788	1,046	817	923	890	642	756	109	111	110	101	108	104
1926	1,058	839	942	829	638	730	1,002	791	888	871	635	743	106	106	106	95	100	98

It is interesting to note, moreover, that the phthisis rate, 730 per million, was actually 2 per cent. lower for 1926 than that yielded by the 1866–1914 curve, so that the forebodings sometimes expressed of late years that the pace in tuberculosis mortality fall could not be maintained have so far been unfulfilled in regard to its main component. The co-existence of this advantage of 2 per cent. for phthisis with an excess of 6 per cent. for tuberculosis as a whole is explained by an excess of 46 per cent. over the curve value for 1926 for non-respiratory tuberculosis. But, as pointed out in the Review for 1921, this curve (1866–1914) had a very considerable upward convexity, the pace of fall having increased as the end of the period, 1914, approached. Prolongation of this curve, therefore, presupposes a decline of mortality from non-respiratory tubercle accelerating to an extent which could not be anticipated as at all likely, especially as the great rapidity of fall before 1914 was probably due in large measure to change in nomenclature (Review for 1921, page 19).

It may well be, therefore, that the 1926 tuberculosis excess of 6 per cent. in Table XXXIX represents not any slackening in the rate of mortality decline, which may be better measured by the phthisis figures, but merely an effect of the abandonment about thirty years ago of the ascription of many deaths in early life to tuberculosis on grounds then recognized as unjustifiable—a process which evidently could not continue indefinitely, even though evidence of its continued activity is referred to below. For this reason it seems better to judge of the progress made by the phthisis record, which has probably been less affected by change of nomenclature than that for tuberculosis, and if this measure is accepted the continuity of decline for the whole sixty year period 1866–1926, apart from the temporary disturbance caused by the war and the influenza epidemic which followed it, is indeed remarkable.

Table XL shows a reduction of mortality in 1926 for each sex at every age distinguished, a very rare if not unprecedented event.

Table XL.—England and Wales: Mortality from Tuberculosis (All Forms) per Million Population, 1912–14, 1925, and 1926.

				Males.			Females.			Persons.		
				1912–14	1925	1926	1912–14	1925	1926	1912–14	1925	1926
All Ages	Crude	..	..	1,572	1,195	1,105	1,169	895	827	1,364	1,038	961
	Standardized	..	..	1,543	1,143	1,058	1,175	904	839	1,348	1,017	942
0–	..	..	..	2,080	1,088	1,025	1,716	910	840	1,899	1,000	934
5–	..	..	..	572	351	339	579	357	344	576	354	341
10–	..	..	..	447	318	278	687	476	407	567	397	342
15–	..	..	..	938	853	764	1,225	1,274	1,162	1,083	1,063	962
20–	..	..	..	1,500	1,346	1,268	1,380	1,496	1,432	1,438	1,423	1,351
25–	..	..	..	1,815	1,483	1,380	1,402	1,234	1,176	1,599	1,347	1,269
35–	..	..	..	2,189	1,693	1,621	1,373	951	872	1,766	1,293	1,216
45–	..	..	..	2,382	1,770	1,626	1,184	730	680	1,760	1,224	1,128
55–	..	..	..	2,211	1,538	1,346	966	654	563	1,552	1,074	935
65–	..	..	..	1,407	978	869	759	506	457	1,046	718	642
75 and upwards	..	..	..	590	427	302	438	320	311	498	362	308

The fall below the pre-war minimum attained in 1912-14 is stated in Table XLI. This shows it to amount to no less than 30 per cent., 31 for males and 29 for females (standardized). For each sex it is greatest, 51 per cent., at 0-5, and remains large throughout childhood. But at 15-20 it diminishes suddenly to 19 per cent. for males and 5 for females, and for each sex it is least at 20-25, the only increase in the table, 4 per cent., for females, occurring at this age. From 25 on substantial and generally increasing falls are recorded for each sex throughout the rest of life.

Table XLI.—England and Wales: Mortality from Tuberculosis in 1926, per cent. of that in 1912-14.

			Males.	Females.	Persons.
All	{	Crude	70	71	70
Ages		Standardized.	69	71	70
0-	..	..	49	49	49
5-	..	..	59	59	59
10-	..	..	62	59	60
15-	..	..	81	95	89
20-	..	..	85	104	94
25-	..	..	76	84	79
35-	..	..	74	64	69
45-	..	..	68	57	64
55-	..	..	61	58	60
65-	..	..	62	60	61
75-	..	..	51	71	62

The excess over the 1912-14 rate for females aged 20-25 was shared until 1926 by females aged 15-20, both groups returning rates in considerable excess of the pre-war minimum for many years during and after the war. This tendency was shared to a less extent by males of the same age. Rates at ages have not been published for males before 1921, but in that year the 1912-14 rate for males was exceeded both at 15-20 and 20-25, the three succeeding years showing excess at 20-25 alone. But even at this age their mortality has now fallen 15 per cent. below the pre-war minimum. The fall of 24 per cent. for males aged 25-35 is considerably greater than for females of the same age (16 per cent.)—a circumstance which confirms much other evidence that the health of war veterans has not suffered on the whole, notwithstanding the large numbers permanently invalided.

The 30,108 deaths from respiratory tubercle form 80 per cent. of the total allocated to tuberculosis, and 6.6 per cent. of those from all causes.

The distribution of this mortality by class of area as well as by sex and age is shown in Table XLII.

The relation of phthisis mortality to urbanization is expressed by the decline of the standardized rate for persons from 81 per 100,000 in London and 88 in the county boroughs to a minimum of 58 in the rural districts, the latter being as much (21 per cent.) below average as the county borough maximum is above it.

Table XLII.—Tuberculosis of the Respiratory System.—Civilian Mortality at Different Ages, 1926.

	Mortality per 100,000 Civilians Living at Various Age Groups.						Ratio per cent. of Mortality in England and Wales.				
	England and Wales.	London.	County Boroughs.	Other Urban Districts.	Rural Districts.	All Urban Districts.	London.	County Boroughs.	Other Urban Districts.	Rural Districts.	All Urban Districts.
MALES.											
All Ages—											
Crude	90	116	113	78	60	98	129	126	87	67	109
Standardized	84	104	104	73	59	90	124	124	87	70	107
0—	16	12	25	11	9	17	75	156	69	56	106
5—	10	8	12	8	9	10	80	120	80	90	100
15—	85	105	104	73	63	91	124	122	86	74	107
25—	127	134	141	121	109	131	106	111	95	86	103
35—	152	179	191	134	100	165	118	126	88	66	109
45—	153	222	202	123	85	171	145	132	80	56	112
55—	124	191	166	100	70	140	154	134	81	56	113
65—	77	154	104	59	40	91	200	135	77	52	118
75 & up	23	54	18	17	24	23	235	78	74	104	100
FEMALES.											
All Ages—											
Crude	66	64	76	61	56	68	97	115	92	85	103
Standardized	64	60	73	60	58	65	94	114	94	91	102
0—	11	6	19	8	7	12	55	173	73	64	109
5—	17	11	21	17	14	18	65	124	100	82	106
15—	114	107	124	110	105	116	94	109	96	92	102
25—	107	99	116	102	104	108	93	108	95	97	101
35—	78	76	93	70	70	81	97	119	90	90	104
45—	61	64	76	51	49	63	105	125	84	80	103
55—	49	61	57	43	39	52	124	116	88	80	106
65—	36	37	42	36	29	38	103	117	100	81	106
75 & up	20	20	28	17	18	21	100	140	85	90	105
PERSONS.											
All Ages—											
Crude	77	88	94	69	58	82	114	122	90	75	106
Standardized	73	81	88	66	58	77	111	121	90	79	105
0—	13	9	22	9	8	15	69	169	69	62	115
5—	13	10	16	13	11	14	77	123	100	85	108
15—	100	106	115	92	82	104	106	115	92	82	104
25—	116	114	127	111	106	118	98	109	96	91	102
35—	112	121	139	99	84	119	108	124	88	75	106
45—	104	137	136	85	67	114	132	131	82	64	110
55—	84	122	109	70	54	93	145	130	83	64	111
65—	55	87	70	46	35	62	158	127	84	64	113
75 & up	22	32	24	17	21	22	145	109	77	95	100

As in previous years (1921–25) for which this comparison has been made, the experience of females in London has been much superior to that of males, their rate being 6 per cent. below average, whereas that for London (and for county borough) males is 24 per cent. in excess. Urbanization in fact, increases

phthisis mortality much more for males than for females. As in other years also, this applies particularly to the higher ages. The contrast between a low early mortality in London and a high rate at 0-5 in the county boroughs is also a recurrent feature. At both extremes of life difference of practice in certification may be of special importance, in early life from the tendency in some cases to regard disease as tuberculous on evidence not accepted in others, and in old age from that to ignore in some cases evidence of the tuberculous nature of certain cases of chronic respiratory disease which in others would be accepted. Whether the discrepancy is to be explained on these lines or not, it may be noted that at each age under 45 the county boroughs rate is higher than that for London, especially at 0-5, and at every age over 45 the London rate is the higher, especially in old age. Taking the London rate as 100 at each age, the ratios for the county boroughs (both sexes) for each of the four recent years for which this table has been published are as follows :—

		1922	1923	1924	1926
0—	..	164	129	175	244
5—	..	157	146	140	160
15—	..	101	109	108	108
25—	..	106	108	108	111
35—	..	106	104	107	115
45—	..	85	91	88	99
55—	..	75	90	86	89
65—	..	67	81	93	80
75—	..	41	72	53	75

The county borough excess in early life has not been so great previously as in 1926, and the London excess in old age has been greater, but the general character of the relationship of the two mortalities has remained the same. In each year of the four county borough excess at every age under 45 has accompanied London excess at every age over 45.

This relationship, however, has not existed in its present form for very long. In both 1911 and 1913, for which similar tables were published, the London rate at 0-5 was in considerable excess of that for the county boroughs. But in each of those years, as recently, London mortality was uniformly higher throughout later life, the excess setting in earlier, at 30 instead of 45.

The change at 0-5 has been brought about by enormous reduction of the mortality certified in London (from 54 per 100,000 in 1911 and 52 in 1913 to 9 in 1926) accompanied by a reduction in the county boroughs which while also large (from 44 and 42 in 1911 and 1913 to 22 in 1926) has been very much less than in London. Evidently the practice of diagnosing respiratory tuberculosis in children aged 0-5 has been dying fast in London and other cities alike, but not so fast elsewhere as in London. It may be added that Table XLII shows the excess over the London

rate at 0-5 to be confined to the county boroughs, and that Table XXXV of the Review for 1925 (dealing with 1921-25) shows it to be practically confined, amongst these, to the boroughs of the North and of Wales, and particularly those of the North.

Table 7 shows that the only administrative counties returning death-rates from phthisis of over 1 per 1,000 were in Wales, Caernarvon coming first, and Cardigan, Merioneth and Carmarthen, in the order named, also exceeding the same limit. In England the highest (crude) rate was 883 per million in London, and the lowest (excluding counties of less than 100,000 population) 459 in Wiltshire. The highest county borough rates were those for Salford, 1,261, Gateshead, 1,245, Liverpool, 1,224, Warrington, 1,222, and Manchester, 1,211. Seven other Northern, two Midland, and two Welsh county boroughs returned rates of over 1,000, and it may be added that of the 16 boroughs exceeding this level in 1926, 14 exceeded it also in 1925, though 14 exceeded it in 1925 but not in 1926.

The death-rates from all the forms of non-respiratory tuberculosis mortality distinguished continue to fall rapidly, as may be seen from Table 5. During the eleven years covered by that table their joint (crude) mortality has fallen from 372 per million to 190, or by 49 per cent. The standardized rate in 1926 is seen from Table XXXIX to have been 942 less 730, or 212 per million living. The excess of 22 over the crude rate is due to reduction of the proportion of children in the total population, which in itself would tend to reduce the crude rate for forms of disease differentially affecting child life, even if no reduction in their mortality were going on. Allowance for this change in the population raises the rate from 190 to 212. This rate is, as already pointed out, 46 per cent. in excess of that of 145 calculated by prolongation of the 1866-1914 curve, but this fact need cause little concern in face of the reduction in eleven years just noted of the crude rate by 49 per cent. Table XXXIII of the Review for 1921 shows that in 1916 the civilian standardized rate was 389, so its reduction to 212 in 1926 implies a fall in eleven years of 46 per cent. for the standardized rate. In view, then, of the fact that the recorded mortality from these forms of tuberculosis has been reduced by almost 50 per cent. in eleven years, whether measured by the crude or by the standardized rate, the excess for the latter of 46 per cent. over that calculated by prolongation of the 1866-1914 curve is of little moment, especially in view of the explanation of its origin already given. For the various sites dealt with in Table 5 the percentage reductions in crude mortality since 1916 and since 1925 are as follows, the latter being distinguished by brackets :—nervous system 48 (6), intestines and peritoneum, 61 (11), vertebral column, 26 (0), joints, 45 (0), other organs, 43 (14), disseminated tuberculosis, 41 (6). No instance of increase in the rate for any form of tubercle in 1926 is recorded, and the most rapid fall is that for abdominal tuberculosis.

38. *Syphilis*.—Deaths allocated to this cause numbered 1,254, 784 of males and 470 of females. Of these 47 per cent. occurred in the first year of life, 5 at 1–5, and 26 per cent. at 45–65. The excess for males over females of 67 per cent. is very unequally distributed throughout life, being 58 per cent. at 0–20, and 93 at ages over 35, while at 20–35 there was an excess of 3 per cent. for females. Similar ratios recur with much regularity year after year. During the last ten years of decline of the syphilis mortality rate from the peak attained in 1917* the excess for deaths of males has been 34 per cent. at 0–20, 4 per cent. at 20–35, and 94 per cent. at 35–, that at all ages being 45 per cent. In each of the ten years there have been more deaths of males both at 0–20 and at 35 and over, excess for the former period varying from 27 to 58 (1926) per cent. and for the latter from 70 to 117. But at 20–35 deaths of males were in excess in four years only, and of females in six. The tendencies represented by the sex ratios in 1926 are, accordingly, very constant. Excess for males at 0–20 seems to be increasing, the highest ratio for the ten years being 158 (per 100 female deaths) in 1926, and three of the four years in which the decennial average excess of 34 per cent. was exceeded occurring in its second half, 1922–26. Of these deaths 91 per cent. occurred in the first year of life, so the tendency has evidently been for infant mortality from syphilis to fall with increasing preponderance upon males as its amount has been reduced from 2·03 per 1,000 births in 1917 to 0·84 in 1926 (Table 9). At 20–35 approximate equality for the sexes and at 35– an excess of close on 100 per cent. for males have been very constant throughout the ten years.

While mortality ascribed to syphilis increased in 1926 from 30 per million in 1925 to 32, that from general paralysis of the insane fell from 40 to 37, that from tabes remained unchanged at 19, and that from aneurysm fell from 27 to 26. The combined rate for these four diseases, therefore, fell from 116 to 114, its lowest level for many years, thus continuing the remarkable fall for this aggregate rate shown in Diag. 1 of the Review for 1924 from 174 in 1917 to 118 in 1924. To the total fall of 60 per

* This peak is much exaggerated in Diag. 1 of the Review for 1924. The curve there plotted applies to both sexes jointly, and if that for males alone is drawn from the records in Table 5 the peak is much accentuated, the rates for 1915–18 inclusive being higher than any before or since. This is largely a consequence of the depletion of the male population during those years by military service abroad. Deaths at military age from syphilis and its consequences occurred for the most part in this country amongst men invalided out of the services, and a comparatively small increase in the number of deaths during the war (the numbers were higher for males both for syphilis and G.P.I. in 1917 than in any adjacent year) sufficed when related to the greatly reduced civilian population to cause a large increase of the resultant death-rate. The course of mortality from syphilitic diseases in the total male population (including non-civilians during the war) is shown in Diag. 3 on page 72. That for females resembles it in showing a general tendency to decline since 1901, interrupted, like that for males, during 1911–17.

million (174-114) syphilis so returned has contributed 28, general paralysis 27, and tabes and aneurysm only 3 and 2 respectively. It may be noted that the general paralysis rate fell from 64 to 41 during the first five of the ten years, and only from 41 to 37 during the second, so its reduction can scarcely be attributed to the recent introduction of treatment by malaria infection. The chief fall in the syphilis rate, on the other hand, has been during the second half of the period.

42. (1). **Vaccinia.**—One death only was classed to this cause in 1926, as against three in 1925 and one in 1924. This was of a female, aged 12 years, certified as dying from basal meningitis. Inquiry as to the cause of this condition (with a view to possibly establishing tuberculous or meningococcal origin) elicited the reply that it was "probably due to vaccination, otherwise of unknown origin." The child had been re-vaccinated, owing to prevalence of small-pox in the neighbourhood (Chorley) three weeks before onset of the meningitis.

Vaccination was mentioned on four certificates relating to other deaths during the year, but in none of these cases did it prove, in the final view of the certifier, to be responsible for the death. (1) A boy aged six months was certified after inquest as dying from "heart failure following erysipelas resulting from septic infection of site of recent vaccination and not directly due to the vaccination itself." This death was allocated to erysipelas. (2) A boy aged four months was certified as dying from "convulsions, constipation, vaccination 7th day," but a subsequent communication stated that "The death was not in any way associated with vaccination." The death was allocated to "convulsions." (3) A male aged seven weeks was certified as dying from "vaccinia toxæmia, coma," but a communication received later stated that "on further investigation of this child's illness I feel that the death was not in any way due to vaccination. I suggest the alternative cause of death to be acute influenzal gastritis." This death, accordingly, was allocated to influenza. (4) A female aged one month was certified as dying from "congenital marasmus, vaccination," but the certifier subsequently attributed the death entirely to marasmus, owing to the fact that a twin sister, vaccinated at the same time and recovered from her vaccination, remained at the time of writing in a very precarious condition. This death was therefore allocated to 160 (1), "congenital debility."

43-49. **Cancer.**—The deaths ascribed to cancer during 1926 number 53,220—24,437 of males and 28,783 of females. For both sexes these numbers are the highest yet recorded.

Of these deaths 42,673 were referred to carcinoma, 2,676 to sarcoma, and 7,871 to "cancer" not otherwise defined. For each sex the number of deaths from carcinoma is the largest, and that from undefined "cancer" the smallest since the record of this distinction started in 1901, but for each sex also the sarcoma deaths of 1926 were exceeded by those of 1924 and 1925, though not of

any previous year. The (crude) sarcoma death-rate of males was also exceeded by those of 1924 and 1925, and that of females in these years and in 1922 and 1923 as well. For each sex the crude carcinoma death-rate is the highest (but *see* page 65) and that from undefined "cancer" the lowest for any of the 26 years compared. During this period the latter rate has fallen by 41 per cent. for males, and by 56 per cent. for females.

Table XLIII shows, for England and Wales, and for different classes of its local areas distinguished by urbanization, the standardized death-rate from malignant disease for each sex and the group rates for persons of different ages from which these are derived, for 1926, and, as a basis of comparison for England and Wales only, similar rates for 1925 and for 1901-10 and 1911-20.

Table XLIII.—Cancer.—Death-rates per 100,000 living, 1901-10, 1911-20, 1925 and 1926.

Age.	England and Wales.				1926.				
	1901-10	1911-20	1925.	1926.	London.	County Boroughs	Other Urban Districts	Rural Districts	All Urban Districts

MALES.									
All Ages—									
Crude ..	77	99	129	131	149	133	125	131	132
Standardized	78	90	102	101	118	114	97	84	107
0— ..	2	2	3	3	2	3	3	2	3
15— ..	4	4	5	4	5	3	4	4	4
25— ..	11	11	11	12	14	14	10	10	12
35— ..	41	42	44	40	45	46	37	31	42
45— ..	155	168	170	164	195	178	160	131	173
55— ..	390	444	478	478	576	571	440	365	513
65— ..	668	800	956	969	1,142	1,088	937	814	1,026
75 and up	787	973	1,322	1,291	1,399	1,346	1,297	1,212	1,329

FEMALES.									
All Ages—									
Crude ..	103	117	138	141	143	138	141	147	140
Standardized	94	96	99	99	103	107	98	90	102
0— ..	2	2	2	3	3	3	3	2	3
15— ..	3	3	3	4	4	4	4	2	4
25— ..	17	16	16	16	17	17	15	16	16
35— ..	85	79	76	74	75	80	73	65	77
45— ..	232	227	222	212	217	231	205	190	217
55— ..	441	438	420	428	456	462	421	378	443
65— ..	666	711	773	798	812	854	797	724	822
75 and up	790	919	1,132	1,126	1,186	1,146	1,140	1,061	1,150

PERSONS.									
All Ages—									
Crude ..	90	108	134	136	146	136	133	139	136
Standardized	87	93	100	100	110	109	97	87	104
0— ..	2	2	2	3	2	3	3	2	3
15— ..	4	4	4	4	4	4	4	3	4
25— ..	14	13	14	14	16	16	13	14	14
35— ..	64	61	61	58	62	65	57	49	61
45— ..	195	198	197	189	207	206	184	162	196
55— ..	417	441	447	452	512	513	430	371	476
65— ..	667	751	855	875	955	957	859	767	912
75 and up	789	940	1,205	1,190	1,260	1,218	1,199	1,126	1,216

The standardized rates for females and for both sexes jointly are the same as in 1925, but that for males (despite increase of the crude rate) is slightly lower. The rate of 102 for males in 1925 is, however, the highest known to have occurred, whereas that of 99 for females in 1925 and 1926 was equalled in 1913, though not in any other year.

It appears, then, that though more deaths of both males and females were assigned to cancer in 1926 than in any previous year mortality was higher for males in 1925, and as high for females in 1913. The excess of mortality for males over that of females, first recorded in 1924, has persisted in each subsequent year. This excess applies only to the standardized rate, the crude being still much higher for females (Table 5) owing to their larger representation at the higher ages specially liable to cancer. Table 5 also shows very much more rapid increase of the crude rate for each sex than that of the standardized, owing to the fact that the former is influenced, and the latter is not, by the rapidly increasing proportion of elderly persons in our population. Taking the rate for 1911 as 100 in each case, those for 1926 compare with it as follows :—

	<i>Crude.</i>	<i>Standardized.</i>
Males ..	147	116
Females ..	130	104
Persons ..	137	110

If this effect of the increasing age of the population is left out of account it is easy to form an exaggerated idea of the extent of the increase in recorded mortality. Standardization is, therefore, especially essential in the study of cancer mortality.

Table XLIII shows the standardized mortality of males as decreasing with decreasing urbanization, in 1926, from a maximum of 118 per 100,000 in London to a minimum of 84 in the rural districts.

The regularity of this gradation has not suffered a single interruption in any one of the nine years, 1911–14 and 1922–26, now available for the comparison. For females, on the other hand, the highest rate has been recorded by London in only four of the nine years, and by the county boroughs in the other five, but in each of the nine the county borough rate, as for males, has exceeded that for the urban districts, and this again has exceeded the rural rate. This association of cancer mortality with the denser centres of population, where facilities for diagnosis, are greatest, (a prominent feature of the returns also of other countries, *e.g.*, the U.S.A.) seems to suggest that this gradation may be largely due to recognition of the nature of a larger proportion of the cases occurring in the towns, and this surmise is supported by the fact that the gradation is very much greater for males than for females, since the proportion of inaccessible growths, liable to escape recognition as cancer, is much higher for the male sex. The

proportions in Table XLIV for standardized mortality in 1911–20 and 1926 are as follows, the 1911–20 rates compared being those comparable with 1926 :—

	1911–20		1926	
	<i>Males.</i>	<i>Females.</i>	<i>Males.</i>	<i>Females.</i>
Accessible ..	326	494	306	474
Inaccessible	674	506	694	526
	<hr/>	<hr/>	<hr/>	<hr/>
	1,000	1,000	1,000	1,000

It may well, of course, be for this reason that recorded mortality is now slightly higher for the male sex, after being consistently in great excess for females for many years (as it still is in most countries). Of the reality and importance, in fact, of improvement in diagnosis as a factor in the recorded increase of cancer mortality there can be no doubt, but it must be remembered that this fact cannot of itself disprove the existence of any real increase. The absence of recorded increase for females since 1913 makes it improbable that their death-rate is now rising to any material extent, especially as their recorded mortality from accessible growths (*i.e.*, from those in situations where their existence can scarcely be overlooked) no longer shows any increase, the comparatively slight rise now occurring for females being confined to the inaccessible sites, where it may well be due to increasing accuracy of diagnosis.

This question was examined, as regards the comparison of 1911–20 with 1901–10, in the Review for 1924, but this comparison is now brought up to date in Table XLIV by including figures for 1926. The classification of sites as accessible and inaccessible is that employed in 1917 and 1924 so far as the comparison between 1901–10 and 1911–20 is concerned. For the comparison between 1911–20 and 1926 it has been possible to transfer the tonsils (grouped in 1901–10 with pharynx) from inaccessible to accessible, miscellaneous skin cancers (classed to the region of the body affected and not to skin in 1901–10) from the indefinite to the accessible group, the trachea (grouped with the larynx in 1901–10) from accessible to inaccessible, and the pelvic cavity (not distinguished from the bony pelvis in 1901–10) from indefinite to inaccessible. This has been done in Table XLIV in order to avoid prejudicing present and future comparisons of this kind by consideration of the conditions governing comparison with 1901–10. The *accessible* sites as now grouped include breast, skin, jaw, tongue, lip, mouth, tonsil, testis, penis, scrotum, uterus, vagina, vulva, larynx, rectum, thyroid, parotid, globe of eye, orbit; and the *inaccessible*, ovary, Fallopian tube, pancreas, kidney, suprarenal, bladder, urethra, peritoneum, omentum, mesentery, prostate, intestine, trachea, lung, pleura, brain, spinal cord, throat, pharynx, œsophagus, liver, gall-bladder, stomach, spleen, mediastinum, thorax, abdomen, pelvic cavity.

Table XLIV.—England and Wales.—Mortality from Cancer of Accessible and Inaccessible Sites at various periods.

	Males.				Females.				
	1901-10	1911-20*	1911-20†	1926	1901-10	1911-20*	1911-20†	1926	
Accessible									Death-Rates per Million
Crude ..	222	287	303	382	497	549	557	646	
Standardized	226	264	276	295	459	455	460	459	
Inaccessible									
Crude ..	498	637	629	869	491	577	578	733	Com- parative Figures
Standardized	504	582	571	670	449	472	472	510	
Accessible ..									
Crude ..	774	1,000	1,000	1,261	905	1,000	1,000	1,160	
Standardized	856	1,000	1,000	1,069	1,009	1,000	1,000	998	
Inaccessible									
Crude ..	782	1,000	1,000	1,382	851	1,000	1,000	1,268	
Standardized	866	1,000	1,000	1,173	951	1,000	1,000	1,081	

* Comparable with 1901-10.

† Comparable with 1926.

The comparative figures show that since 1911-20 the crude rates have increased more than three times as much as the standardized, as a consequence of the rapidly increasing proportion in the population of persons of the higher ages to which cancer is so largely confined. This forms a good illustration of the necessity, referred to above, of standardization in studying cancer mortality at the present time, though indeed, as will be seen later, temporal comparison for any form of mortality specially affecting old people is rapidly becoming meaningless without allowance for their increase in our population. For this reason the standardized rates alone will be considered.

In the Review for 1924 it was pointed out that whereas for females there was an increase of 5 per cent. between 1901-10 and 1911-20 in mortality from cancers of inaccessible sites, the returns which would be most liable to be affected by improvement in diagnosis (to which the whole of the recorded increase is sometimes attributed), there was a slight decrease for the accessible sites, these changes being, of course, wholly consistent with the view referred to. But the case was different for males. For them there was increase of mortality both from accessible and inaccessible growths, and rather more (17 per cent.) from the former than the latter (15 per cent.) This fact was held to indicate that for males the recorded increase was in some degree a real one, as if due merely to improvement in diagnosis it should affect chiefly the less accessible sites where the existence of growths may be overlooked.

Fortunately this conclusion does not apply to the comparison of 1926 with 1911-20, between which periods the mortality of males for which inaccessible sites are responsible has increased by 17 per cent., but that from accessible growths only by 7 per cent. Throughout the whole of the period dealt with there has

been little change in the rate for female mortality from accessible growths, a small decrease in the earlier period being succeeded by a still smaller decrease in the later. For females increase has for the whole period dealt with in Table XLIV (before which there are no records on which similar comparisons can be based) been confined to the inaccessible sites, for which it has been greater in the second period dealt with than in the first.

For both sexes alike, therefore, there is no longer any evidence afforded by the comparison of accessible and inaccessible sites in favour of the reality of the recorded increase. The more recent data are consistent with the view that it is due to improvement of diagnosis, but of course they do not prove its truth. It may indeed be argued that as lives are undoubtedly now being saved in increasing numbers by modern methods of treatment, the mortality of females from accessible cancers, which is that mainly affected by this consideration, would not be stationary, but definitely decreasing, if the frequency of cases remained unchanged.

Comparisons such as that in Table XLIV are facilitated by Tables XLV and XLVa, which provide for each sex comparable, because standardized, rates of mortality for all the cancer sites distinguished in our tabulation for 1901-10, 1911-20, and, for all the more important sites in 1926. It is hoped that these tables will be of use to students of cancer mortality by providing material for the various comparisons which may suggest themselves, such as that above made between accessible and inaccessible sites. Unfortunately, as the list of sites employed from 1911 onwards was not developed from that current during 1901-10, but from the site groupings of the International List of causes of death, it has not been possible to present comparable figures for 1901-10 applying to all the sites now distinguished. (See Table XLV.) Table XLVa represents an attempt to overcome this difficulty as far as possible by re-grouping sites for which no statement for 1901-10 can be made in Table XLV in such a way that death-rates for these groups can be stated for both 1901-10 and 1911-20. In most cases the obstacle to comparison in Table XLV can be recognized from the constitution of the group in Table XLVa, as for instance the grouping together in a single line of all the male genital organs for 1901-10, whereas they are now dealt with partly under skin and partly (testes) in association with other glandular organs. But in other cases difficulty in comparing with 1901-10 is due largely to the fact that the list of sites then in use did not make separate provision for the skin as a whole, which forms No. 48 of the International List. Certain parts of the skin, face, lip, nose, scalp and ear, were separately distinguished, but growths of other parts of the skin were grouped with other growths of the region of the body concerned. This was done in the case of the abdomen, and the fact largely accounts for the excess of the abdomen rate for 1901-10 in Table XLVa.

Table XLV.—Cancer Mortality :—Rates per Million Population (Standardized) 1901-10, 1911-20 and 1926.

Note.—For 1926 figures are inserted for the more important sites only, those of less importance being marked ?. The asterisks representing entries for many sites in 1901-10 indicate that while no separate rates can be shown for such sites, they are dealt with, as far as now possible, in Table XLVa. Where even group comparison fails for 1901-10 ? is inserted.

Part of body affected.	Males.			Part of body affected.	Females.					
	Males.				Females.					
	1901-10	1911-20	1926		1901-10	1911-20	1926			
All Sites 43 :—	784	897	1,010	Other Skin (contd.)—Penis Scrotum Other Parts Total 48..	*	6.6	6.9	—	—	1926
Lip	12.8	12.6	10.6	49 :—	*	2.4	2.7	—	—	4.7
Tongue	43.1	50.8	43.7	Larynx ..	?	7.1	7.7	?	5.3	14.1
Mouth	13.7	15.3	17.8	Trachea ..	?	33.3	35.2	?	15.2	7.3
Tonsil	*	8.2	11.8	Thyroid Body ..	*	23.9	33.5	*	6.0	0.1
Jaw	22.6	25.1	21.0	Lung ..	*	0.3	0.2	*	0.1	?
Total 43 ..	?	111.9	104.9	Pleura ..	*	1.7	2.2	*	0.1	?
44 :—				Heart and Pericardium ..	1.4	12.7	23.3	3.3	4.2	5.5
Pharynx ..	*	10.8	13.1	Parotid Gland ..	10.2	0.7	?	7.0	7.0	9.2
Esophagus	51.2	60.6	65.4	Pancreas ..	0.7	0.1	?	0.5	0.5	?
Stomach ..	167.2	186.4	222.2	Spleen ..	0.1	3.2	2.7	0.0	0.0	?
Liver	97.3	87.1	61.2	Kidney and Suprenals ..	2.5	16.7	26.0	1.0	1.3	?
Gall Bladder	97.3	6.0	9.1	Bladder ..	14.5	1.6	?	11.8	13.1	21.2
Total 44 ..	?	350.9	371.0	Urethra ..	1.6	1.2	?	1.4	1.5	?
45 :—				Prostate ..	8.4	9.1	11.4	7.6	7.2	8.8
Mesentery	1.6	1.0	?	Testes ..	24.5	28.2	30.0	8.6	9.7	11.1
Omentum	6.6	1.8	?	Brain ..	11.8	26.5	47.9	—	—	—
Peritoneum	?	3.2	?	Spinal Cord ..	*	4.9	5.2	—	—	—
Small Intestines	?	4.7	4.5	Globe of Eye, Orbit ..	6.4	3.3	?	4.5	2.6	?
Cæcum ..	?	6.1	9.1	Lymphatic Glands ..	0.4	0.5	?	0.3	0.4	?
Colon ..	?	35.0	65.7	Bones—Skull ..	2.3	2.1	1.8	2.0	1.6	?
Hepatic Flexure	?	0.6	?	Spinal Column ..	?	11.6	13.1	?	4.7	6.0
Splenic Flexure ..	?	1.4	?	Rib, Sternum, Clavicle ..	1.0	1.4	?	0.7	1.0	?
Sigmoid Flexure	?	12.7	21.5	Pelvis ..	1.9	2.1	?	1.4	1.8	?
Intestines undefined	?	36.2	26.5	Arm ..	1.2	2.2	?	0.8	2.4	?
Total Intestines	63.5	96.8	131.5	Leg ..	*	3.1	?	*	0.9	?
Rectum and Anus	79.8	93.6	107.2	Undefined ..	*	5.3	5.4	*	4.4	4.7
Total 45 ..	?	196.4	243.9	Mediastinum ..	*	0.2	?	*	0.1	?
46 :—				Thorax ..	*	9.2	13.3	4.5	4.6	6.0
Ovary and Fallopian Tube	—	—	—	Pelvic Cavity ..	8.1	0.7	?	1.9	0.5	?
Uterus ..	—	—	—	Abdomen ..	2.2	0.8	?	*	2.1	?
Vagina Vulva ..	—	—	—	Neck ..	*	5.2	?	*	8.5	6.5
Total 46.	—	—	—	Throat ..	*	13.5	9.3	?	2.8	?
47 :—				Axilla ..	?	2.2	?	*	0.4	?
Breast ..	1.5	1.6	1.7	Groin ..	*	0.6	?	1.2	0.7	?
48 :—				Other Localities ..	1.1	1.0	?	1.1	0.8	?
Rodent Ulcer	*	6.7	7.5	Multiple ..	?	4.0	4.6	*	2.7	?
Other Skin—Face	*	7.3	6.6	Undefined ..	?	1.5	?	*	1.8	?
Nose	*	0.7	?	Total 49 ..	*	1.7	?	*	1.7	?
Scalp	0.7	0.5	?		?	203.1	254.5	?	98.7	110.2
Ear	1.8	2.1	?							

Table XLVa.—Supplementary to Table XLV.

	Males.		Females.	
	1901-10	1911-20	1901-10	1911-20
Skin of Face (includes Rodent Ulcer)	14.7	14.1	7.9	8.2
Skin of Nose	1.5	1.1	1.1	0.8
Pharynx, Throat, Larynx and Trachea (includes Tonsil)	33.3	45.5	8.7	10.9
Shoulder, Arm, Leg, Hip ..	12.3	12.0	10.3	9.3
Testes and Penis (includes Scrotum)	11.9	13.9	—	—
Abdomen	10.1	5.9	16.8	9.6
Pelvis (includes Pelvic Cavity) ..	4.2	3.9	5.9	4.5
Not Stated (including in both decades undefined, multiple, back, and bones undefined, so classed in 1901-10)	7.3	4.8	8.6	4.8

In preparing these tables the question arose whether in view of the remarkable change in age distribution of cancer mortality during the period covered (*see* Diagram 4, page 74) continued use of the 1901 population, which assigns relatively high weight to mortality at the earlier ages, might not prejudice comparison between the mortality of (or about) that date and that of recent years, which is so much more concentrated upon the higher ages. It seemed possible that a standard assigning less weight to the latter than that now appropriate to them might understate the recorded increase of mortality. This matter was therefore tested by comparing cancer mortality for 1921-25 with that for 1901-05 on three bases, those of population distribution in 1901, 1911, and 1921. It was found that the increase for males in 1921-25 over 1901-05 amounted to 31 per cent. for total cancer, and 20 per cent. for cancer of the tongue, whichever of the three census standards tested was employed. In view of this result it is felt to be safe for the present to continue the use of the 1901 standard, change of which would involve very serious consequences to the comparability of standardized rates in the future and in the past.

If we examine Table XLV for sites of accessible cancer in males showing the feature of smaller increase in 1926 than in 1911-20 characterising the accessible sites generally this is found to be manifested in the highest degree by cancer of the tongue and jaw, both of which record considerable increase in 1911-20 followed by considerable decrease in 1926. From 1901-10 to 1911-20 their mortality increased almost to the same extent, 17 per cent., as that of the accessible sites generally, but since then it has decreased by 15 per cent., thus reducing an increase of 15 per cent. for the other accessible sites to the 7 per cent. shown for these sites as a whole in Table XLIV. Had it not been for this change in buccal cavity cancer mortality, therefore, the rate for accessible sites in the male would still be increasing almost as

fast as that for inaccessible (15 per cent. for other accessible sites since 1911–20 as against 17 for inaccessible). The change which has occurred is therefore to a large extent localized in the tongue and jaw.

Of these the former is the more important, its mortality being about double that of the jaw. Its record, moreover, may be of somewhat special interest because the rapidity of increase in mortality from tongue and jaw cancer was invoked in the Report for 1917 as evidence that the recorded increase of mortality from cancer could not be attributed altogether to improvement in diagnosis. For these reasons its standardized mortality has been determined for each year from 1901, when the record commences, onwards, with results which are recorded in Table XLVI and plotted in Diag. 3.

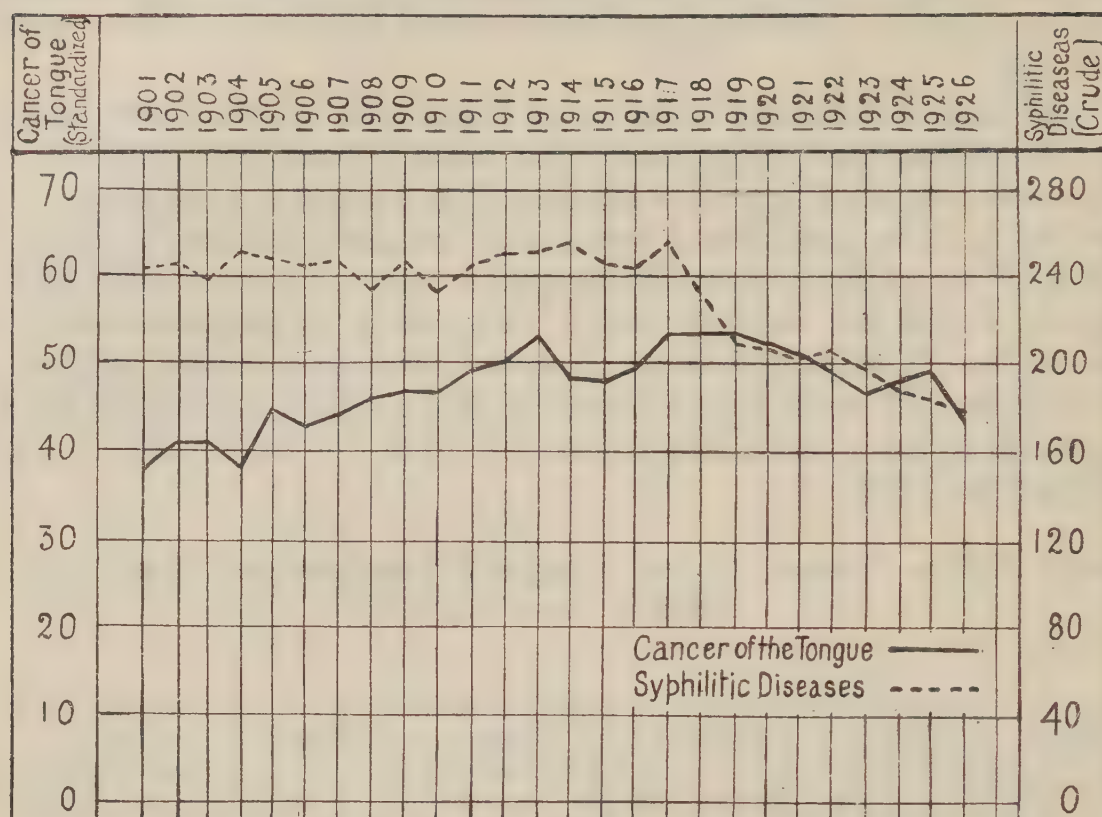
Table XLVI.—Cancer of the Tongue : Standardized Death-rates. Males, 1901–1926.

Year.	Standardized Rate per million.	Year.	Standardized Rate per million.	Year.	Standardized Rate per million.
1901	38·1	1911	49·0	1921	50·6
1902	40·6	1912	50·0	1922	49·0
1903	40·5	1913	52·6	1923	47·2
1904	38·2	1914	48·0	1924	48·1
1905	45·0	1915	47·0	1925	48·7
1906	42·7	1916	49·2	1926	43·7
1907	43·6	1917	52·5		
1908	46·0	1918	53·3		
1909	46·9	1919	53·4		
1910	46·7	1920	52·0		

Table XLVII. Crude Mortality from Syphilitic Diseases : Males, 1901–1926. Comprehensive Rate per Million Living (Syphilis, G.P.I., Tabes, Aneurysm).

Year.	Crude Rate per million.	Year.	Crude Rate per million.	Year.	Crude Rate per million.
1901	241	1911	245	1921	202
1902	243	1912	251	1922	205
1903	239	1913	252	1923	198
1904	251	1914	255	1924	188
1905	249	1915	246	1925	183
1906	244	1916	242	1926	179
1907	246	1917	256		
1908	235	1918	234		
1909	247	1919	209		
1910	235	1920	208		

Diagram 3. Mortality of Males from Cancer of the Tongue (Standardized) and Syphilitic Diseases (Crude).



Increase, it will be seen, was steady and rapid before the war, the rate rising from 38.1 per million in 1901 to 52.6 in 1913, an increase of 38 per cent. in 13 years. Then after a fall during the earlier years of the war the maximum of 53.3 and 53.4 was reached in 1918 and 1919, since when the rate has fallen by 18 per cent. to its level of 43.7 in 1926. No attempt to explain these facts can be made here. They are simply placed on record for the consideration of students of the cancer problem. But it has been thought of interest to plot along with the curve of lingual cancer mortality another dealing with that from syphilis, of which the measure taken is the crude mortality attributed jointly to syphilis itself, tabes dorsalis, general paralysis of the insane, and aneurysm. In order to bring the two curves into juxtaposition the vertical scale used for syphilis is one fourth of that for tongue cancer. Syphilis mortality must therefore be read by the scale to the right of the diagram, that on the left applying to lingual cancer. The sudden fall of syphilis mortality during 1918 and 1919, followed by slower decline since, was pointed out in the Review for 1924, where the synchronism of the fall with the introduction of organised anti-venereal effort was noted. In addition to its effects it is very possible that the decline may in some part reflect the results of training in regard to the prevention and cure of venereal disease received by many men during their period of military service. However this may be the simultaneity of decline in the two forms of mortality plotted in Diag. 3 is very striking. If it be suggested that any effects upon tongue cancer mortality of decrease in syphilis must be subject to considerable delay it may be pointed out that the same is true of syphilis mortality, which as here plotted results mainly from

general paralysis of the insane and other slowly developing and protracted consequences of the disease. The object of plotting the syphilis curve in Diag. 3 is merely to bring out the correspondence in date between the peak of its curve and that for lingual cancer, leaving the interpretation of this to the reader. While doing this it may be well to point out that decrease of syphilis is not the only influence making for decrease of lingual cancer known to have been operative during the last few years. During this period the teeth of the working classes have been much more cared for than previously as a result of the National Health Insurance scheme, and it may be presumed therefore that irritation of the tongue by jagged stumps has become less frequent. In this connexion it may be pointed out that whereas in the United States, where dental care is generally supposed to be more widely exercised than in this country, the tongue accounts for a little less than 1 per cent. of the total cancer deaths, the proportion here is more than twice as great. (American proportion 0·9 per cent. in 1924, English $2\frac{1}{4}$ per cent in 1926, both sexes.)

One of the most remarkable facts in the statistical history of lingual cancer mortality is the extent to which it has shifted from earlier to later life. In considering this change, as in dealing with the changes in recorded mortality, due allowance must be made for the automatic results of the increasing age of the population, which would of itself bring about a considerable increase in the proportion of deaths occurring at the higher ages. This allowance has been made in Table XLVIII by standardization. The proportions of deaths at each age per thousand at all ages stated in this table are not those of the actual deaths registered, but of those resulting from application of the recorded age group death-rates to the standard population (1901). We are thus dealing with the same population throughout the comparison, and the changes recorded in the table are therefore due only to change in the age incidence of the disease.

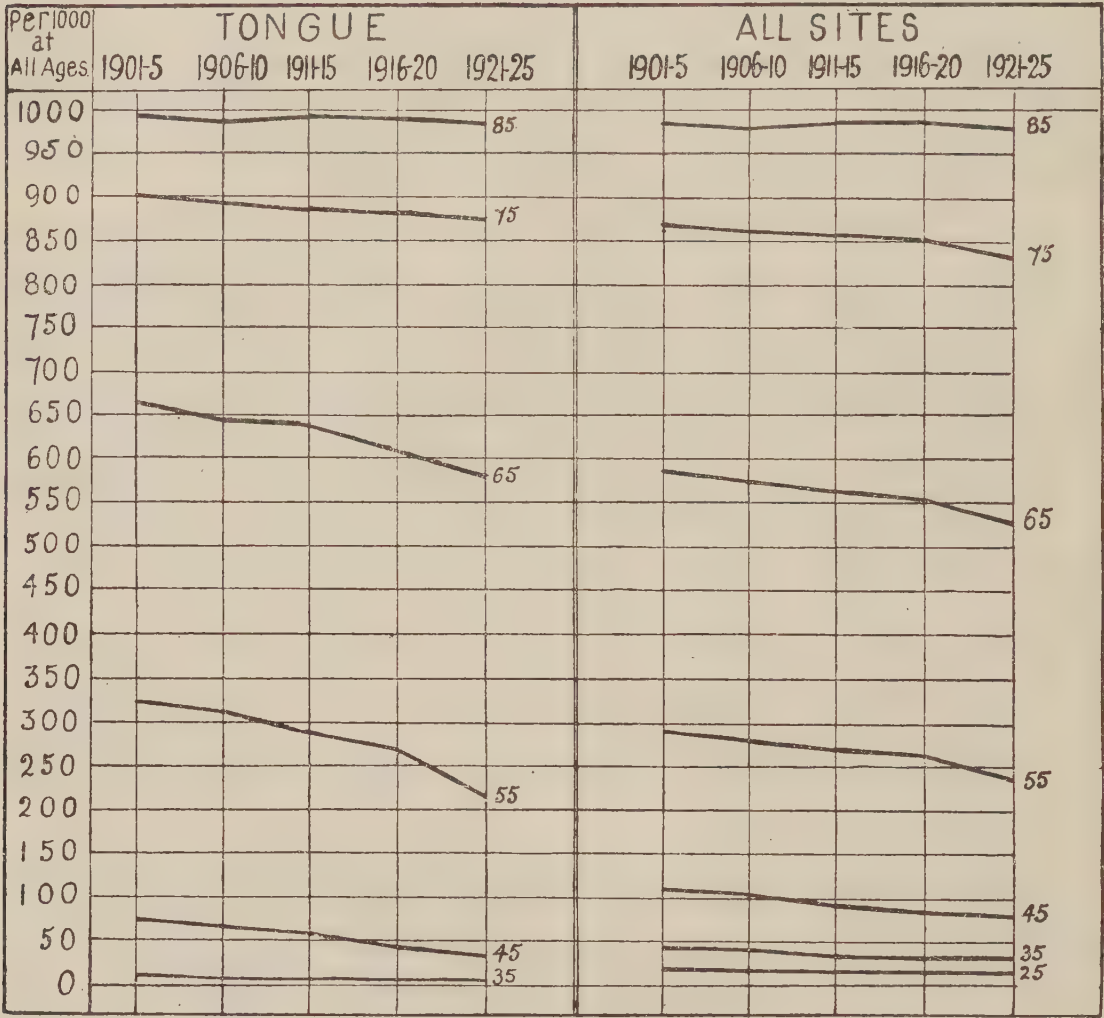
The changes noted are all in the same direction—a shifting of mortality towards the latter end of life. The fact that this process is in operation for cancer as a whole has frequently been pointed out in these Reviews, and in order to compare its extent for the tongue with that for cancer in general similar records for the latter are compared with those for the tongue in Table XLVIII and in Diag. 4 prepared from it. It will be seen that the shift

Table XLVIII.—England and Wales—Age Distribution of the Standardized Mortality of Males at different Periods from Cancer of the Tongue and of all Sites.

		Proportion under each Age.									
		Tongue.					All Sites.				
		1901-05	1906-10	1911-15	1916-20	1921-25	1901-05	1906-10	1911-15	1916-20	1921-25
Under 25		0	0	0	0	0	20	21	19	17	17
„ 35		5	4	4	4	4	43	43	39	36	36
„ 45		74	66	57	48	33	110	107	98	93	88
„ 55		321	314	293	265	216	289	281	269	257	238
„ 65		664	648	636	610	581	586	578	566	552	529
„ 75		901	898	894	892	877	866	861	857	851	837
„ 85		992	991	994	992	990	987	985	987	987	984
Total		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

is much more rapid for the tongue than for total cancer, and that its pace is increasing. From this it would seem to follow that this change, at least, cannot be attributed to improvement of diagnosis, which, in the absence of these data for the tongue, might well be suspected of responsibility for the change in total cancer. There is little doubt, for reasons discussed in previous Reviews, that cancer diagnosis is at its worst in the aged, and it might well be thought, therefore, that the shift of its incidence towards the end of life had resulted merely from improvement of diagnosis acting

Diagram 4. England and Wales, Males : Age distribution of Mortality from Cancer at Different Periods. Proportion of Standardized Deaths under Various Ages per 1,000 at all Ages.



chiefly where there is most room for it. But if this were the explanation of the change in age incidence of total cancer we should expect this change to be less than average in the case of the tongue, because the obvious nature of the disease when its fatal termination is reached affords little opportunity of mistaking or concealing the diagnosis, and so little scope for improvement in certification. The deaths registered may be assumed substantially to represent the facts throughout the period dealt with, and the remarkable shift of mortality noted for cancer of the tongue seems therefore a strong argument in favour of the reality of some portion at least of the corresponding change for cancer in general, though here the possible influence of improvement in certification must be admitted.

A further deduction from Diag. 4 may be noted. The change in age distribution is independent of the change in mortality. If the increased proportion of deaths in old age were related to increase in total mortality this proportion would have fallen for the tongue since 1916-20, as mortality has fallen, but the diagram shows that its rate of increase has been faster since mortality began to fall than while it was increasing. So whatever the causes may be which are differentially increasing the cancer mortality of the aged they appear to be independent of those which are increasing the recorded mortality from cancer.

Although consideration of the changes recorded for lingual cancer has been restricted to males because of the slight extent to which females are affected by it, Table XLV shows a fall in mortality for females as well as males, so if their deaths had been included the results arrived at would have been much the same. Cancer of the tongue was selected for special study for reasons independent of its virtual restriction to males, and after this decision had been taken it seemed better to simplify matters by restricting consideration to the sex almost exclusively affected. Any cancer site selected as a test of the reality or otherwise of the recorded increase of cancer mortality in general should preferably possess two characteristics, accessibility and fatality. If the site is not so accessible that cancer is quite easy to diagnose (at death) increase of recorded mortality may represent improvement in diagnosis; and if cancer of the site in question is not naturally refractory to treatment a fall in recorded mortality may represent the effects of improved treatment. The tongue is of special interest as combining both qualifications to an exceptional extent, even though prospects of recovery after early treatment by operation or irradiation appear now to be greater than has hitherto been thought.

The female breast, being very accessible, and of much greater quantitative importance than the tongue, would be very suitable as an index to changes in the mortality of cancer in general but for its relative amenability to treatment, which is known to have prevented mortality from increasing as it must otherwise have done. The fact, therefore, that Table XLV records a continuous and considerable increase in mortality from cancer of this site is of considerable significance. It seems difficult to conceive that deaths from breast cancer escaped recognition twenty years ago, and it is certain that their number would be greater than it is at the present time if treatment had not improved during the same period. But changes in the physiological use of the organ may well affect the mortality, as this is much higher for single than for married women.

It may be of interest, in view of the newly established excess of recorded mortality for males (Table XLIII) to compare the records for the sexes in Table XLV in respect of sites common to

both. In doing this it will be well to exclude the breast, in addition to the more distinctive organs of sex, as in its case the conditions are so different for males and females. When this is done mortality in Table XLV common to the sexes amounts in 1911-20 to 855 per million for males and 578 for females, and in 1926 to 946 for males and 604 for females, the excess for males being 48 per cent. in 1911-20 and 57 in 1926, and increase (1926 over 1911-20) for common sites being 11 per cent for males and 5 for females.

The parts of the body affected by fatal cancer in 1926 are shown in Table XLIX in greater detail than that provided by the international classification, six out of its seven headings (Nos. 43-49) relating to cancer being subdivided according to a scheme approved by the Director of the Imperial Cancer Research Fund.

Table XLIX.—England and Wales, 1926—Sites of Fatal Cancer.

		All Ages.	0-	5-	15-	25-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85-
		MALES.															
	All Sites	24,437	63	65	135	319	315	666	1,367	2,344	3,284	4,284	4,419	3,591	2,298	946	341
43	Lip	249	—	—	—	—	1	2	8	15	19	33	47	46	37	26	15
	Tongue	1,085	—	—	2	3	2	18	58	127	191	242	210	108	89	26	9
	Mouth and tonsil	729	1	1	2	5	5	12	34	80	125	149	125	101	56	24	9
	Jaw	507	3	3	3	11	3	10	23	44	76	94	92	73	47	17	8
	Total	2,570	4	4	7	19	11	42	123	266	411	518	474	328	229	93	41
44	Pharynx	324	—	2	3	2	3	4	18	28	60	65	48	61	21	8	1
	Esophagus	1,624	—	—	—	4	9	22	80	194	305	321	294	209	120	50	16
	Stomach	5,426	—	1	3	54	83	202	400	545	750	977	991	762	451	164	43
	Liver and gall bladder ..	1,691	5	—	4	11	11	42	82	131	193	270	330	289	215	79	29
	Total	9,065	5	3	10	71	106	270	580	898	1,308	1,633	1,663	1,321	807	301	89
45	Mesentery and peri- toneum	127	3	3	7	6	3	8	6	13	24	15	10	15	8	5	1
	Intestines	3,155	—	4	9	37	43	75	134	252	308	556	614	558	359	164	42
	Rectum	2,606	—	—	6	22	23	55	118	200	330	469	539	434	272	98	40
	Total	5,888	3	7	22	65	69	138	258	465	662	1,040	1,163	1,007	639	267	83
47	Breast	43	—	—	—	—	—	3	4	1	4	9	9	7	4	—	2
48	Penis	163	—	—	—	1	—	4	9	21	12	20	27	31	23	9	6
	Scrotum	69	—	—	—	—	3	2	5	8	12	16	13	5	4	1	—
	Other skin	585	—	1	3	8	7	7	22	41	47	69	90	77	93	72	48
	Total	817	—	1	3	9	10	13	36	70	71	105	130	113	120	82	54
49	Larynx	831	—	—	—	5	5	13	57	104	156	152	152	102	58	22	5
	Lung and pleura	578	3	2	7	17	27	31	63	101	104	96	65	39	18	5	—
	Pancreas	635	—	—	—	10	15	28	43	82	95	118	110	76	34	17	7
	Kidneys and suprarenal glands	264	16	13	2	9	5	13	15	30	46	51	26	24	9	4	1
	Bladder	723	1	—	3	7	5	18	22	64	92	110	148	128	76	37	12
	Prostate	1,145	—	—	1	2	4	2	12	34	90	177	251	277	190	78	27
	Testes	110	2	1	5	21	13	7	13	8	10	6	7	6	7	3	1
	Brain and meninges ..	51	1	2	3	5	5	9	11	6	3	3	3	—	—	—	—
	Bones (jaw excepted) ..	389	10	13	40	19	10	19	28	35	54	61	36	29	26	7	2
	Other specified organs ..	810	16	14	22	49	22	48	78	114	97	116	100	77	38	12	7
	Abdominal cavity, organ unspecified	98	1	1	1	1	2	—	6	6	12	19	13	14	11	9	2
	Other and undefined ..	420	1	4	9	10	6	12	18	60	69	70	69	43	32	9	8
	Total	6,054	51	50	93	155	119	200	366	644	828	979	980	815	499	203	72

Table XLIX.—England and Wales, 1926—Sites of Fatal Cancer—*cont.*

			All Ages.	0-	5-	15-	25-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85-
FEMALES.																		
All Sites			28,783	56	67	131	526	771	1,386	2,279	3,052	3,471	4,018	4,178	3,894	2,799	1,465	690
43	Lip	17	—	—	—	—	—	—	—	—	—	2	3	1	3	1	1	6
	Tongue	108	—	—	—	1	4	—	4	10	11	12	11	16	18	7	13	1
	Mouth and tonsil ..	115	—	2	2	—	1	2	2	6	5	23	18	22	17	9	8	—
	Jaw	193	3	4	1	6	3	11	10	16	21	30	35	23	17	7	7	6
Total			433	3	6	3	7	8	17	26	32	58	62	74	61	34	29	13
44	Pharynx	82	1	—	—	—	4	7	13	11	11	11	7	5	7	2	2	3
	Œsophagus	521	—	—	—	8	11	18	32	69	73	74	78	68	47	24	19	—
	Stomach	4,823	—	—	5	50	81	162	250	425	532	736	861	809	533	276	103	—
	Liver and gall bladder..	2,314	4	2	6	13	19	53	93	169	227	363	374	437	327	149	78	—
Total			7,740	5	2	11	71	115	240	388	674	843	1,184	1,320	1,319	914	451	203
45	Mesentery and peri- toneum	254	5	1	4	7	11	12	28	32	32	41	34	27	13	5	2	—
	Intestines	4,027	—	2	14	47	52	104	187	298	420	554	694	675	563	279	138	—
	Rectum	1,751	—	—	6	39	40	56	101	143	210	244	265	279	205	114	49	—
	Total	6,032	5	3	24	93	103	172	316	473	662	839	993	981	781	398	189	—
46	Ovary and Fallopian tube	984	—	3	16	42	50	76	118	139	141	138	122	69	48	16	6	—
	Uterus	4,409	1	—	6	126	190	369	570	645	640	579	494	401	249	101	38	—
	Vagina and vulva ..	398	—	—	1	5	10	17	16	43	41	52	68	50	56	28	11	—
	Total	5,791	1	3	23	173	250	462	704	827	822	769	684	520	353	145	55	—
47	Breast	5,296	—	—	1	85	206	359	607	709	707	712	629	526	378	238	139	—
48	Skin	427	—	—	2	5	8	9	11	22	26	41	48	76	75	66	38	—
49	Larynx	212	—	—	—	2	5	8	27	35	39	25	30	21	8	10	2	—
	Lung and pleura ..	272	—	2	6	9	8	9	27	39	43	39	43	27	12	6	2	—
	Pancreas	621	—	—	4	7	13	19	37	60	89	102	92	98	66	23	11	—
	Kidneys and suprarenal glands	219	26	14	7	6	6	2	19	18	16	27	29	27	13	7	2	—
	Bladder	331	2	—	—	1	—	13	18	30	28	49	55	55	45	21	14	—
	Brain and Meninges ..	56	—	6	4	4	7	11	6	6	2	3	2	2	2	1	—	—
	Bones (jaw excepted) ..	330	7	13	28	25	10	23	32	33	33	28	31	30	20	14	3	—
	Other specified organs..	602	5	11	14	24	23	31	34	60	66	89	85	77	44	30	9	—
	Abdominal cavity, organ unspecified	200	—	2	1	1	2	7	8	11	17	21	34	42	37	13	4	—
	Other and undefined ..	221	2	5	3	13	7	4	19	23	20	28	29	32	17	13	6	—
	Total	3,064	42	53	67	92	81	127	227	315	353	411	430	411	264	138	53	—

50. Tumours not returned as malignant.—As a result of the revision of the International List in 1920, this title now includes all non-malignant tumours except those of the brain, eye, and female genital organs. It also includes a slightly larger number of growths of unstated nature, which cannot on the evidence given be classed either as benign or malignant. In order to secure a comprehensive presentation of all deaths attributed to tumours, all of these not returned as due to cancer are assembled in Table L, including mortality of this nature affecting the brain, eye, and female genital organs, but it is to be understood that, in accordance with international practice, the latter is excluded from the numbers shown under this head in Tables 4, 17, and 18.

As in other recent years adenoma of the prostate is classed to 135 Diseases of the Prostate and not to 50 because the deaths so returned seem to be of the nature of prostatic hypertrophy.

Table L.—England and Wales, 1926 : Deaths attributed to Tumours not returned as Malignant.

Part affected.	All Ages.		0—		15—		35—		45—		55—		65—		75—	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>Tumours classed with other disease of organ affected.</i>																
84.2. Cerebral tumour	575	559	75	56	109	130	109	104	138	130	100	88	40	43	4	8
Cyst	14	8	3	2	4	2	1	—	5	1	—	1	1	1	—	1
Glioma	110	93	14	12	22	31	22	15	27	21	17	8	8	5	—	1
Neurofibroma	—	4	—	—	—	1	—	1	—	1	—	1	—	—	—	—
Psammoma	—	4	—	—	—	—	—	—	—	1	—	2	—	—	—	1
Other benign	4	5	—	1	1	—	2	1	—	2	1	1	—	—	—	—
Nature unstated.. .. .	447	445	58	41	82	96	84	87	106	104	82	75	31	37	4	5
In 85. Eye	1	3	1	2	—	—	—	—	—	—	—	—	—	1	—	—
Glioma	1	2	1	2	—	—	—	—	—	—	—	—	—	—	—	—
Nature unstated	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
In 135. Prostate	218	—	—	—	—	—	—	—	4	—	32	—	95	—	87	—
Adenoma	209	—	—	—	—	—	—	—	4	—	28	—	92	—	85	—
Fibro-adenoma	7	—	—	—	—	—	—	—	—	—	3	—	3	—	1	—
Fibroid	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Myoadenoma	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
137. Ovarian tumour	—	309	—	—	—	28	—	42	—	52	—	71	—	69	—	47
Cyst	—	279	—	—	—	28	—	39	—	48	—	65	—	59	—	40
Other benign	—	7	—	—	—	—	—	1	—	1	—	—	—	4	—	1
Nature unstated.. .. .	—	23	—	—	—	—	—	2	—	3	—	6	—	6	—	6
139. Uterine tumour	—	416	—	—	—	20	—	117	—	173	—	46	—	27	—	33
Fibroid, Fibro-myoma, Myoma	—	389	—	—	—	17	—	114	—	160	—	42	—	23	—	33
Fibro cystic	—	4	—	—	—	—	—	1	—	2	—	—	—	1	—	—
Polypus	—	7	—	—	—	2	—	1	—	3	—	1	—	—	—	—
Other benign	—	5	—	—	—	—	—	1	—	3	—	1	—	—	—	—
Nature unstated.. .. .	—	11	—	—	—	1	—	—	—	5	—	2	—	3	—	—
In 141.2. Other female genital organs	—	6	—	—	—	2	—	3	—	1	—	—	—	—	—	—
Broad ligament cyst	—	4	—	—	—	1	—	3	—	—	—	—	—	—	—	—
Tubo-ovarian cyst	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Labium cyst	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
<i>50. Tumours not classed with other diseases of organ or part affected.</i>																
Pituitary gland .. Adenoma	3	5	—	—	1	—	1	4	—	—	—	1	1	—	—	—
Glioma	1	2	—	1	—	—	—	—	—	1	—	—	1	—	—	—
Other benign	5	3	1	1	1	1	—	—	2	1	—	—	1	—	—	—
Nature unstated	12	5	—	—	6	3	3	—	1	—	2	1	—	—	—	1
Thyroid Adenoma	7	33	—	1	3	2	—	5	1	7	1	12	2	5	—	1
Other benign	—	2	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Nature unstated	—	2	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Spinal cord Angioma	2	2	1	—	1	—	—	1	—	—	—	—	—	1	—	—
Glioma	7	1	—	—	1	—	2	—	—	—	—	—	2	1	2	—
Other benign	4	1	—	—	1	—	—	—	1	—	—	1	1	1	1	—
Nature unstated	6	6	—	—	1	—	1	—	1	1	2	3	1	2	—	—
Ear Polypus	2	1	—	—	2	—	—	—	—	—	—	1	—	—	—	—
Other benign	2	2	1	1	—	—	—	—	1	1	—	—	—	—	—	—
Nose Polypus	5	5	—	—	1	—	3	—	—	1	—	1	1	2	—	1
Other benign	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Larynx Papilloma	6	3	3	—	—	—	—	—	2	—	1	—	—	2	—	1
Other benign	3	—	—	—	—	—	—	—	—	—	1	—	1	—	1	—
Nature unstated	4	3	—	—	—	—	—	—	—	2	3	—	1	—	—	1
Mediastinum Non-malignant	2	1	—	—	—	1	—	—	—	—	1	—	—	—	1	—
Nature unstated	73	38	—	1	3	6	6	5	14	4	30	8	17	13	3	1
Lung Non-malignant	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Nature unstated.. .. .	35	14	1	—	2	—	3	—	8	5	15	3	5	4	1	2
Parotid Mixed Tumour	1	2	—	—	—	—	—	—	—	—	—	—	—	2	1	—
Other benign	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Œsophagus Non-malignant	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Nature unstated	3	2	—	—	—	—	—	—	—	—	—	—	3	—	—	2

Table L.—England and Wales, 1926 : Deaths attributed to Tumours not returned as Malignant—*continued.*

Part affected.		All Ages.		0-		15-		35-		45-		55-		65-		75-	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
50. Tumours not classed with other diseases of organ or part affected—contd.																	
Intestine ..	Adenoma ..	3	—	—	—	—	—	—	—	—	—	1	—	2	—	—	—
	Papilloma ..	3	1	—	—	1	—	1	—	—	—	1	—	—	1	—	—
	Polypus ..	—	3	—	1	—	—	—	—	—	—	1	—	—	—	—	1
	Other benign ..	4	3	—	—	—	—	2	—	2	1	—	—	2	—	—	—
	Nature unstated	20	31	—	1	1	—	—	1	2	3	6	5	1	11	10	10
Liver ..	Non-malignant ..	2	2	—	—	—	—	—	—	1	—	—	1	1	1	—	—
	Nature unstated	6	10	—	—	2	—	—	—	3	2	2	1	4	1	1	1
Pancreas ..	Cyst ..	2	8	—	—	—	1	—	—	1	2	1	3	—	—	—	2
	Nature unstated	5	2	—	—	—	—	—	—	1	—	—	1	3	1	1	—
Kidney ..	Cyst ..	1	4	—	—	—	—	—	—	—	—	2	—	—	1	1	1
	Other benign ..	4	1	1	—	—	—	—	—	1	1	1	—	1	—	—	—
	Nature unstated	13	11	1	—	—	—	1	1	2	2	6	1	2	3	1	4
Bladder ..	Papilloma or villous ..	117	38	1	—	3	—	4	1	14	1	34	9	38	9	23	18
	Other benign ..	1	2	1	—	—	—	—	—	—	—	—	—	1	—	1	1
	Nature unstated	8	8	—	—	—	—	—	—	—	—	2	—	4	1	2	7
Prostate ..	Non-malignant ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	Nature unstated	8	—	—	—	—	—	—	—	—	—	5	—	2	—	1	—
Breast ..	Non-malignant ..	—	4	—	—	—	—	—	1	—	—	—	1	—	1	—	1
	Nature unstated	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Spine ..	Non-malignant ..	—	2	—	—	—	—	—	—	—	—	1	—	1	—	—	—
	Nature unstated	3	6	—	—	—	—	—	—	3	2	2	1	1	—	—	—
Sacrum ..	Non-malignant ..	2	1	—	—	1	—	—	1	—	—	—	—	—	—	1	—
Neck ..	Non-malignant ..	6	2	—	—	—	—	1	—	2	—	—	—	1	1	2	1
	Nature unstated	2	1	—	—	—	—	—	—	1	—	—	1	—	—	1	—
Thorax ..	Non-malignant ..	2	2	1	1	—	1	—	—	—	—	—	—	—	—	1	—
	Nature unstated	8	1	—	—	—	—	—	—	3	—	3	—	1	—	1	1
Abdomen ..	Non-malignant ..	—	4	—	—	—	—	—	—	—	—	1	—	2	—	—	1
	Nature unstated	17	40	—	—	1	1	1	1	1	6	1	9	7	13	6	10
Other sites ..	Non-malignant ..	26	30	2	2	9	2	4	2	1	6	5	6	3	8	2	4
	Nature unstated	10	10	—	—	1	—	1	2	2	—	4	5	1	2	1	1
Site not stated ..	Non-malignant ..	2	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
Total (50) ..		462	362	14	10	43	18	35	26	66	53	131	83	107	96	66	76
Total, all tumours ..		1256	1655	90	68	152	198	144	292	208	409	263	288	242	236	157	164
,, benign tumours ..		576	984	30	25	53	91	44	192	66	268	98	163	161	134	124	111
,, nature unstated ..		680	671	60	43	99	107	100	100	142	141	165	125	81	102	33	53

The number of deaths so returned has increased so rapidly of late years (from 32 in 1911 to 217 in 1926) as to leave little room for doubt that the change is one in medical nomenclature and not in the incidence of the disease. The age distribution is that of "prostatic hypertrophy."

Deaths of males from papilloma of the bladder have also increased, from 44 in 1911 and 71 in 1912, to 117, the largest number yet recorded, in 1926. During the same period deaths of females attributed to this cause have increased from 19 in 1911 to 38 in 1926.

57. Diabetes.—The deaths allocated to this disease numbered 4,506, 1,973 of males and 2,533 of females, corresponding to standardized death-rates of 86 for males and 91 for females. This rate has been in excess for females in each year from 1923 onwards, whereas before that date excess for males was an invariable rule. But the reversal of the sex ratio in 1923 represented merely a stage in a process which had been in operation for many years. In 1861–70 the standardized mortality of females was 49 per cent. of that for males, and in succeeding decades, 52, 62, 71, 81, and 85 (1911–20) per cent. respectively. Text-book descriptions of the disease, naturally based on pre-1923 data, refer to male excess as one of its features, and two points in regard to the matter suggest themselves as open to doubt, (1) whether the female excess of the last four years will prove permanent, and (2) whether the progressive change in the sex ratio since 1861–70 represents an actual change in the sex incidence of diabetes mortality or whether it may not be due in some degree to a change in professional interpretation of the facts in death certificates. Diabetes is a disease found largely in proportion to the extent to which it is sought, and the (standardized) mortality recorded has more than trebled since 1861–70. If then it was more looked for in males in earlier years because of the belief that it was chiefly a male risk, the great male excess of earlier years may have been in part at least due to this fact. As to the permanence of the change, the fact that female excess has been uninterrupted for the four years since it was first recorded seems very significant; but in 1926 an increase of the standardized rate for males (from 81·4 to 86·1) has been accompanied by a fall in that for females (from 93·7 to 90·0). The reversal of the sex ratio in 1923 might perhaps be thought to have some connexion with the introduction of a new specific treatment for the disease in that year but for the fact that it merely represents one stage in a change which has been seen to have been continuously in progress for over sixty years.

In the Review for 1925 the recent history of diabetes mortality was examined in some detail and its response to food restriction during the war and to the introduction of insulin in 1923 was pointed out, the former having temporarily reduced the mortality mainly of old women and the latter having so far chiefly reduced that of young and middle-aged men (*see* Diag. 1 of that Review). In 1926 there is a further fall for males at 25–35 and 45–55 to the lowest levels yet attained at these ages, but their mortality has increased at each age over 55. For males, then, the effect of insulin in lowering the death-rate at ages under 55 has been maintained in 1926. In youth and middle age, 15–55, the mortality of 1926 varies for the four decennial age groups concerned from 60 to 70 per cent. of the corresponding rates for the last three years before the introduction of insulin—1920–22, so the death-rate for males of these ages has fallen by one third since the introduction of the new remedy, but at all ages over 55 it

remains quite unaffected, rates in 1926 for the three age groups concerned being in excess of those for 1920–22 by 5–24 per cent. It may be recalled that the recently issued report on occupational mortality in 1921–23 shows that diabetes mortality is highly graded by social class at ages over 55, but not in earlier life, so it appears to be almost entirely in later life that luxurious habits and overeating cause deaths attributed to diabetes. There is no evidence in the returns that insulin has had any effect in reducing this type of mortality, which continues to rise for both sexes, but as against this may be set the very substantial reductions (from the 1920–22 level), of about one-third for males and one-fourth for females, at 15–55. The small mortality of children under 15 has fallen much more (44 per cent. in 1926) for girls than for boys (7 per cent.). Increase of the mortality of later life (over 1920–22) increases with age in each sex, amounting at 75 and over in 1926 to 24 per cent. for males and 28 for females.

As a consequence of these changes diabetes is rapidly becoming much more a disease of old age than formerly. At each age over 55 the proportion of deaths to the total at all ages has increased for both males and females in 1926 as compared with 1920–22, even after allowance is made for ageing of the population; and at all ages under 55 in females, and all except 0–15 in males, it has fallen.

58. (a) **Pernicious Anæmia.**—The history of this form of mortality in England and Wales extends back only to 1920, the first year for which entries can be made in Table 5. But as these deaths may be seen from this table to contribute almost 90 per cent. of the total mortality classed to the international title No. 58 “Anæmia, chlorosis,” their history prior to 1920 can be inferred with considerable confidence from the record for that title. This shows a rise from 48 per million for males and 60 for females in 1911 to 62 and 75 respectively in 1915, using total, and not, as in Table 5, civilian, population as basis for the male rates during 1915–20. After 1915 the rate for males fell to a minimum of 55 in 1918 and 1919, since when it has gradually risen to 68 in 1926. The rate for females also fell from 75 in 1915 to 60 in 1918, since when it has risen to 91 in 1926. The increase since the war is almost entirely accounted for by deaths attributed in certification to pernicious anæmia, mortality from which has increased since 1920 from 55 to 60 for males, and from 62 to 81 for females. It thus appears practically certain that mortality from pernicious anæmia was rising before the war for each sex,* fell during the war to a minimum for each at its close, and has since risen by about 25 per cent. for males and 50 for females. The suggestion as a causative influence of some form of dietetic error, restrained by food restriction during the war (cf. diabetes mortality of elderly persons, the changes in which, like those in pernicious anæmia,

* The rate for the former title “anæmia, leucocythæmia” rose from 46 in 1897 to 59 in 1911 for males, while that for females changed only from 72 in 1897 to 70 in 1911.

apply chiefly to females) and rapidly increasing since its close, seems obvious; but theories of the causation of pernicious anæmia are many, and it is not desired to add to their number. It is fortunate that its distinction from other forms of anæmia has been effected in time to note the effect upon its mortality of the new specific treatment by liver diet.

66. Alcoholism.—This heading in the International List of causes of death excludes organic disease attributed to alcoholism, so, in order to obtain as complete information as possible with regard to mortality from overindulgence in alcohol, all the deaths in certification of which any mention of alcohol appears are assembled in Table LI. These deaths make up a total of 498, as against 115 classed to heading 66 as directly due to alcohol. The causes most frequently associated in death certification with mention of alcoholism, with the number of deaths in the case of each, were:—cirrhosis of the liver, 132; violence, 53; heart disease, 51; and lobar pneumonia, 22 (broncho-pneumonia, 11).

For alcoholism, in both the wider and the narrower sense indicated above, the abatement noted in previous Reviews as having followed high taxation and licensing restrictions during and after the war still continues. The history of this fall may be traced now more precisely than in former Reviews since it is no longer necessary to deal during the war period with death-rates for civilians only. These tend to exaggerate mortality from such causes as alcoholism, because, while having little effect on the number of deaths, they imply much decrease of the population at risk. Applying total deaths of males to total male population, the crude (male) mortality from cause 66 is found to have fallen from 25 per million in 1914 to 3 in 1918, after which it rose to 9 in 1920, and now stands at 4. The parallelism of this movement with that of average alcohol purchasing power is obvious.

But it may be seen from Table LI that the deaths tabulated to alcoholism form only a minority of those certified as having been in some degree due to this cause, numbering, in 1926, 115 out of 498. The more inclusive totals dealing with alcoholism in the wider sense have behaved much as those shown for title 66 in Tables 4 and 5. The inclusive rate for all males in 1926, 17 per million, is lower than for any previous year except 1918 (16). In both 1913 and 1914 this rate stood at 73. The corresponding fall for females is from a maximum (since 1910) of 46 per million, also in both 1913 and 1914, to 9, but in their case the rate was only 6 in 1918 and 1919 (and 8 in 1924). This striking reduction in the total mortality associated in certification with alcoholism is distributed in a curiously unequal way over the forms of disease chiefly concerned. Table 5 and its predecessors show that the rate for alcoholism proper was about 24 per million for males and 12 for females before the war, fell to 3 (allowing for military population) for males and 1 for females in 1918, and, after a brief rise to 9 and 3 in 1920, stands in 1926 at 4 for males and 2 for

Table LI.—England and Wales, 1926 : Deaths from or connected with Alcoholism.

		All Ages.		Under 25.		25–		35–		45–		55–		65–		75–	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
66.	Deaths attributed solely to alcoholism	76	39	—	—	6	3	18	9	30	9	18	15	4	3	—	—
Deaths attributed to other causes in conjunction with alcoholism :—																	
5.	Malaria	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
11.	Influenza	5	2	—	—	—	—	3	1	1	1	1	—	—	—	—	—
21.	Erysipelas	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
31.	Tuberculosis of the respiratory system	5	1	—	—	—	—	1	1	2	—	2	—	—	—	—	—
38.	Syphilis	2	1	—	—	—	—	—	—	—	—	1	1	1	—	—	—
41.	Septicæmia	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
43–49.	Cancer	2	2	—	—	—	—	—	—	1	—	1	2	—	—	—	—
50.	Mediastinal tumour not returned as malignant ..	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
51.	Rheumatic fever	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
52(1).	Chronic rheumatism	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
52(2).	Osteo-arthritis	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
52(3).	Gout	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
57.	Diabetes	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
68.	Chronic poisoning by organic substances	—	2	—	—	—	—	—	1	—	1	—	—	—	—	—	—
70(2).	Encephalitis	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
71.	Meningitis	1	2	—	—	—	—	—	—	1	—	1	1	—	—	—	—
73.	Myelitis	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
74.	Cerebral hæmorrhage, apoplexy, etc.	4	3	—	—	—	—	—	—	3	1	—	2	—	—	1	—
75(b).	Paraplegia	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
76.	General paralysis of the insane	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
78.	Epilepsy	1	2	—	—	—	—	—	1	1	1	—	—	—	—	—	—
82.	Neuritis	1	11	—	—	—	—	1	1	—	6	—	2	—	1	—	1
	Other diseases of the nervous system	2	1	—	—	—	—	—	—	1	—	1	1	—	—	—	—
88(3).	Acute myocarditis	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
90(1–4).	Valvular disease of heart ..	1	2	—	—	—	—	—	—	—	—	1	—	—	2	—	—
90(5).	Fatty heart	12	8	—	—	1	—	3	3	3	1	3	3	2	—	—	1
90(7).	Other or unspecified myocardial disease	14	7	—	—	1	—	2	1	4	4	5	1	2	1	—	—
90(9).	Heart disease (undefined) ..	3	3	—	—	—	—	—	1	1	—	2	1	—	1	—	—
91(b).	Arterio sclerosis	3	2	—	—	—	—	2	1	1	1	—	—	—	—	—	—
91(c).	Other diseases of the arteries ..	2	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—
99.	Bronchitis	2	1	—	—	—	—	—	—	1	—	1	—	—	—	—	1
100.	Broncho-pneumonia	9	2	—	—	—	—	4	—	3	1	—	1	2	—	—	—
101(a).	Lobar pneumonia	17	5	—	—	1	—	3	1	6	2	4	1	3	1	—	—
102.	Pleurisy	2	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—
105.	Asthma	1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—
107(a).	Fibroid phthisis	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
108(1).	Oral sepsis	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
111(a).	Ulcer of the stomach	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
112(1).	Inflammation of the stomach ..	—	7	—	—	—	—	—	—	2	—	3	—	—	—	—	1
112(2).	Other diseases of the stomach ..	4	—	—	—	—	—	—	—	1	—	2	—	1	—	—	—
113–114.	Diarrhœa and enteritis	1	2	—	—	—	—	—	—	1	—	—	—	1	1	—	—
118(a).	Hernia	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—
119.	Ischio rectal abscess	2	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
120.	Acute yellow atrophy of liver	—	2	—	—	—	—	—	2	—	—	—	—	—	—	—	—
122(a).	Cirrhosis of the liver	82	50	—	—	1	2	10	2	31	20	23	20	16	3	1	3
125.	Acute hæmorrhagic pancreatitis	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
128–129.	Nephritis	9	2	—	—	—	1	1	—	4	1	3	—	1	—	—	—
135.	Enlarged prostate	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
139.	Fibroid of uterus	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
141(1).	Menopause	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
165–174.	Suicide	7	3	—	—	1	—	1	—	2	2	2	1	2	—	—	—
182.	Accidental drowning	3	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—
185.	Injury by fall	17	11	—	—	—	1	—	3	8	4	4	2	4	1	1	—
188.	Injury by crushing (vehicles, railways, etc.)	4	—	—	—	—	—	2	—	—	—	2	—	—	—	—	—
	Other violence	5	3	—	—	1	—	1	—	1	1	2	2	—	—	—	—
Total		315	184	—	—	14	7	54	30	114	64	84	61	45	15	4	7

females. Of the various forms of organic disease returned as associated with alcoholism, cirrhosis of the liver is seen from Table LI to be numerically by far the most important. The number of deaths so returned has been reduced by a little under 50 per cent. since they were first distinguished in 1911, the 82 deaths of males and 50 of females in Table LI corresponding to 126 and 111 in the earlier year. These numbers reached a minimum for each sex at the end of the war—58 for males in 1918 and 28 for females in 1919. But in the same period deaths of males from lobar pneumonia in these tables have fallen from over 100 before the war to 17 in 1926 (12 in 1925) and of females from about 30 to 5, so this mortality is now returned as only one-sixth of what it was. Similarly deaths from alcoholic nephritis have fallen from about 35 yearly for each sex before the war to about one-sixth of the number (9 males and 2 females in Table LI) in recent years. The reduction is similar for alcoholic neuritis, while fatty degeneration of the heart and violence occupy an intermediate position, deaths from each being now about a quarter of the number returned before the war. The sex ratios in Table LI are fairly typical of the usual experience, lobar pneumonia furnishing the chief example of male excess, and neuritis the only consistent example of female excess. Cirrhosis of the liver is consistently in excess for males, but to a much smaller extent than lobar pneumonia. There is a large excess of deaths from violence for males, but from fatty heart and nephritis of alcoholic origin mortality is as a rule nearly as heavy for females as for males.

74. Cerebral Hæmorrhage, Apoplexy, etc.—The number of deaths assigned to this cause, 11,939 of males and 15,269 of females, 27,208 in all, suffices to make it one of the most important causes of death numerically, though as it chiefly kills old people by a process of local senescence it is by no means of corresponding importance from the point of view of preventive medicine.

Although the records in Table 5 (even when related to total instead of civilian males during the war) make it appear that crude mortality from this cause is about stationary, allowance for a change in certification, which is transferring an increasing proportion of these deaths to another cause, shows that the crude rate is rising for each sex, as is natural in view of the increasing age of the population. The increase, however, is of such an order that it might well disappear on standardization.

The change mentioned consists in referring the hæmorrhage back to the arterial disease giving rise to it. As a result of the rule of classification followed in this country (as in others) which prefers a cause to a consequence, deaths so certified have to be classified to the arterio-sclerosis which is returned as causing the hæmorrhage and are consequently lost to the latter. To remedy this a new sub-heading was created in 1921, under 91 (*b*) arterio-sclerosis, for deaths with record of cerebral vascular lesion.

Adding this mortality—91 (*b*) 1—to that for cause 74, the combined total is found to have risen since 1921 from 745 (crude rate per million) to 804 for males and from 817 to 885 for females. It is of some interest to note that the proportion of the total deaths for which arterio-sclerosis is noted is consistently higher for males than females in each of the six years under survey, rising for males from 16 per cent. in 1921 to 21 per cent. in 1925 and 1926, and for females from 11 per cent. in 1921 to 15 in each year 1924-26. In 1914, in which year 1,258 deaths of males and 990 of females are known to have been returned as under the present title 91 (*b*) 1, the proportion was 10 per cent. for males and 6 for females, or just under half of that for each sex in 1926. This observation confirms other evidence pointing towards a somewhat greater elaboration of certification for males than females, as well as towards increase of this elaboration for both sexes.

In this connexion it may be noted that the crude rates for both males and females suddenly rose in 1915 to the highest level reached since the introduction of the current classification in 1911 (dealing with total, and not "civilian" mortality for males); but that by 1918 the rate for each sex had fallen to the lowest level reached during these sixteen years. It is possible, of course, to conceive that the perturbations of the early stages of the war may have sent up the mortality in 1915, but it is also conceivable that the increase in 1915 was connected with the withdrawal from civilian practice of many of the younger practitioners, who would be most likely to follow the growing fashion of referring these deaths to arterio-sclerosis. If the same death certified by an older practitioner would be allocated to cerebral hæmorrhage, and by a younger to arterio-sclerosis, it is easy to see how war might at first increase mortality attributed to the former heading. Its reduction in 1918 may appear to be incompatible with this explanation of the earlier rise, since the younger practitioner did not return to civil life till after that year. But it seems very possible that by 1918 war conditions may have brought about an actual reduction of the mortality. Overeating is recognized as playing an important part in the causation both of arterio-sclerosis in general and of cerebral hæmorrhage, and it is quite conceivable, therefore, that food restriction during the war may have diminished this form of mortality in its later stages, just as it did that from diabetes in later life. It may be noted also that the rapid increase for each sex of mortality ascribed to arterio-sclerosis, presumably more as the result of a change in the practice of certification than of increase in the disease (Table LIII), was largely checked during the years of war. If the present distinction of 91 (*b*) 1 had been in operation in 1915 it would have been possible to test the truth of the explanation suggested for the sudden increase of cerebral hæmorrhage in that year, for this should have been accompanied by a fall in these deaths from arterio-sclerosis with record of cerebral vascular lesion, but they were not separately tabulated

till 1921, except, as noted above, for the single year 1914. But the numbers recorded in that year are quite sufficient to account for the increase in 1915. For if we assume these 1,258 and 990 deaths to have been included with cerebral hæmorrhage in 1915 though excluded (as they are known to have been) in 1914, then their deduction from the 1915 cerebral hæmorrhage deaths should make these comparable with 1914. When so diminished, the 1915 deaths fall below the 1914 level.

The question whether, and to what extent, mortality from cerebral hæmorrhage is increasing, is of importance, because this form of mortality is well fitted to serve as an index to that from degenerative circulatory disease in general. From time to time cries of alarm are raised at increase of recorded mortality from degenerative disease of the circulatory system, but that from disease of the heart and arteries will be shown (pages 90 and 92) to be largely dependent upon changes in the methods of describing similar deaths. This has been already referred to in connexion with arterio-sclerosis, which is rapidly replacing "old age" in certification. And similarly myocardial degeneration is much oftener mentioned now than in former years on the death certificates of sufferers from chronic bronchitis, etc. As one of the current rules of classification (10*a*, "Manual," page xxiv) prefers heart to respiratory disease if the two appear on the same certificate, this change in vogue of certification results in the transfer of all such deaths from bronchitis, etc., to heart disease. Little certain significance attaches, therefore, to the recorded increase in crude mortality from heart and arterial disease, and if the progress of these forms of mortality is to be estimated some cause of death must be sought as index which belongs to the same general group and yet is so distinctive in its features as to be unlikely either to escape record if observed or to be recorded if not actually present. It is believed that cerebral hæmorrhage (in its wider sense, embracing thrombosis, embolism, etc.) fulfils these conditions. These deaths are for the most part of a dramatic and distinctive nature, so that the margin of error in diagnosis should be relatively small; while the chance of cerebral hæmorrhage, if diagnosed, escaping record in certification must be very small indeed. For these reasons the course of this form of mortality, important in itself (in 1926 7·3 per cent. of all deaths were ascribed to titles 74 and 91 (*b*) 1) is admirably adapted to serve as index to that of a much wider group of deaths, including those from degenerative changes of the heart, arteries, and kidneys, numbering in 1926 about 95,000, or 21 per cent. of the total mortality.

Unfortunately, satisfactory comparison of the death-rate from cerebral hæmorrhage with its own past is not altogether an easy matter. The effect of change in certification has been already referred to, and a change in classification, made in 1901, prevents comparison between the present century and the last. Until that date deaths from cerebral embolism and thrombosis, now

separately tabulated as 74 (b) 1 and 2, and so found to form 15 per cent. of the total for 74 in 1926, were assigned to embolism and thrombosis generally, and not distinguished as affecting the brain. For this reason no attempt has been made to trace this rate back further than 1901-10, at which time the present title No. 74 was approximately represented by the two headings "cerebral hæmorrhage, cerebral embolism" (which included cerebral thrombosis) and "apoplexy, hemiplegia." The numerical relation of these two groups of deaths to the present 74 cerebral hæmorrhage, apoplexy, etc., is known, for the deaths of 1911-20 have been tabulated by the list used in 1901-10 (*see* Annual Report, 1920, Table 9) as well as by the International List now followed. By the former they numbered, for the two groups jointly, 125,691 and 156,128 for males and females, and by the latter 117,237 and 144,993. The combined headings of the former list were thus slightly more comprehensive than the present 74, but this can be allowed for by multiplying the 1901-10 rate by .933 in the case of males and by .929 for females, so reducing the crude rate for males from 669 to 624, and that for females from 765 to 711.

During 1901-10 it is believed to have been quite exceptional to find arterio-sclerosis mentioned as the cause of cerebral hæmorrhage, and consequently there was little or no loss of such deaths to arterial disease. In this belief it has been assumed that the equivalent of the two 1901-10 groups named is represented by 74 and 91(b)1 jointly, and not by the former alone. It is, therefore, their joint totals which have to be compared with the 1901-10 rates decreased by the factors stated. This comparison shows an increase for males from 624 in 1901-10 to 804 in 1926, and for females from 711 to 885.

But, although use has been made above of the crude rates stated in Table 5 in dealing with war time changes, these deaths occur so preponderantly in old age that crude mortalities tend to show an unreal increase, as for cancer, due to the ageing of the population. To determine whether or no the records point to increase of mortality it is therefore necessary to standardize them. So treated the two groups of deaths named as representative for 1901-10 of cerebral hæmorrhage ("cerebral hæmorrhage," "cerebral embolism," and "apoplexy, hemiplegia") yield combined rates of 695 per million for males and 686 for females with which those for subsequent periods may be compared, after reducing them, by use of the factors stated, to 648 and 637. But this comparison will be unsatisfactory for years before 1921, when an unknown number of these deaths were being allocated to arterial disease (91 (b) 1). For 1911-20, however, the incomplete rates (standardized) for 74 alone were 617 for males and 600 for females. These rates are lower than those for 1901-10, but the extent of their under-statement by transfer to arterial disease cannot be determined.

In 1926 the standardized rates for 74 and 91(b)1 jointly are 640 and 592 for males and females, comparing with 648 and 637 for 1901–10, so mortality appears to be declining slightly, at least for females. The corresponding crude rates in 1926 are 804 for males and 885 for females. So a slight real decline in the standardized rate has been accompanied by a large increase of the crude rate (from 624 in 1901–10 to 804 for males and from 711 to 885 for females) as a consequence of the large proportionate increase of old people in the population. It is thus easy to be misled by the crude rates, which represent mortality as increasing considerably for each sex when it is probably decreasing slightly, and as higher for females (owing to their greater age) when it is really higher for males. The results arrived at may be recapitulated as follows :—

Mortality from Cerebral Hæmorrhage.

	1901–10.		1911–20 (excluding deaths now classed to 91(b)1).		1926 (including deaths classed to 91(b)1).	
	Males.	Females.	Males.	Females.	Males.	Females.
Crude	624	711	657	754	804	885
Standardized	648	637	617	600	640	592

The conclusion derived from these rates is supported by the record for another disease largely belonging to the same group of cardio-vascular degenerations and closely associated with cerebral hæmorrhage—chronic nephritis. The standardized mortality from this cause is shown on page 100 to have fallen for males by 36 per cent. since 1915, and for females by 32 per cent. since 1914, after a long preceding period of increase.

In the light of these facts there can be little doubt as to the unreality of the apparent increase of mortality from heart disease, which disappears on standardization (Table LII) and from arterio-sclerosis, which does not.

84 (3) **Disseminated Sclerosis.**—During the six years since these deaths were first distinguished in Table 17 their number has increased from 632 in 1921 to 809 in 1926, and the corresponding death-rate from 16 to 21 per million for males and from 18 to 20 for females (Table 5). Most of the deaths occur in later middle life, the proportion between 45 and 70 (Table 17) being 65 per cent. for males and 56 for females.

84 (4) **Paralysis Agitans** is recorded as increasing even more rapidly since it also was first distinguished in 1921, the rate for males rising from 19 in that year to 28 in 1926, and for females from 16 to 22. This increase may be of interest in relation to the recent prevalence of encephalitis lethargica. One death was recorded at 15–20, but mortality is almost confined to old age, the proportion of deaths at ages over 65 in 1926 being 68 per cent. for males and 77 for females.

73 and 84 (5). **Diseases of the Nervous System not separately distinguished in Table 17.**—As only a few of the numerous forms of nervous disease known to pathology are separately dealt with in the International List of Causes of Death, it has been thought advisable to record the numbers of deaths allocated to some of the more important causes not there distinguished. The most important numerically are myelitis 212 deaths, transverse myelitis 130, bulbar paralysis 197, progressive muscular atrophy 196 (and chronic anterior poliomyelitis 13) spastic paraplegia 181, and neurasthenia 79. The deaths assigned to the latter cause numbered 113 in 1921. Syringomyelia is stated to have caused 20 deaths and Huntington's chorea 18. Deaths attributed to subacute combined degeneration of the spinal cord have increased from 7 in 1921 to 38 in 1926, each succeeding year recording a higher number than its predecessor. This experience forms a good illustration of change of vogue in certification.

87–90. **Heart Disease.**—The number of deaths allocated to this cause, 64,465, 30,023 of males and 34,442 of females, was as usual larger than for any other item in the list of causes. The crude mortality of 1,650 per million population (1,606 for males and 1,691 for females) is the highest recorded during (at least) the present century, for persons and for males, while for females it is exceeded only by that for 1925. But this increase in the crude rate does not necessarily imply any real increase of a form of mortality falling so preponderantly on old age as does heart disease at a time when the proportion of old people in the population is rising so rapidly as it is at present. If this change is allowed for by standardization we find that the rate for males in 1926 is reduced from 1,606 to 1,299, comparing with 1,348 in 1911–20. Reduction for females is still greater, from 1,691 to 1,189, the corresponding rate in 1911–20 being 1,223. Thus not only does standardization convert an apparent increase into a decrease, but also an apparent excess for females into an excess for males (cf. cerebral hæmorrhage, page 88) this was so also in 1922 and 1924, for which standardized rates are available. Table 5 shows the crude rate in excess for females in each of these years, but in 1922 the standardized rates were—males 1,301, females 1,218 (a little higher than in 1926) and in 1924—males 1,271, females 1,175.

The history of heart disease mortality during the present century is outlined in Table LII, which distinguishes sex and age, and includes the allowance, so necessary in this case, for the effect of the increase in age of the population. The deaths allotted to heart disease in 1901–10 slightly exceeded those which would have been so classed under the international scheme since followed, but the excess is so small as to be compensated for by factors of $\cdot 980$ for males and $\cdot 988$ for females. Application of these to the standardized rates for 1901–10 reduces them to 1,408 and 1,321 for males and females, but it has not been thought necessary

to apply this slight correction (which would affect the age group rates also, in varying degrees) to the record for 1901–10 in Table LII.

Table LII.—England and Wales—Mortality from Heart Disease (87–90) at different Periods, distinguishing Sex and Age.

		All Ages.		0–	15–	25–	35–	45–	55–	65–	75–
		Crude	Stand- ardized.								
Males	1901–10	1,410	1,437	127	261	392	903	2,208	5,778	11,941	17,189
	1911–20	1,442	1,348	110	265	387	751	1,793	4,810	11,570	20,252
	1926	1,606	1,299	79	175	269	535	1,439	4,015	11,809	27,357
Females	1901–10	1,459	1,337	157	280	411	938	2,093	5,045	10,672	15,372
	1911–20	1,475	1,223	142	290	394	754	1,681	4,051	9,852	18,117
	1926	1,691	1,189	98	215	301	553	1,262	3,432	10,196	25,298

At all ages under 65 the recorded mortality has fallen for each sex since 1911–20, and at all under 75 since 1901–10, but there has been a continuous rise at ages over 75, of much greater extent in the last ten years or so than in the ten years 1901–10 to 1911–20. It can, however, be stated with some confidence that this increase is wholly fictitious, being due entirely to a change in the prevailing method of certifying deaths of a certain type in old age, which has been very noticeable during the last few years. Fortunately its numerical effects are recorded, from 1921 onwards, in the tabulation. In that year title 90 (7) “Other or unspecified myocardial disease” (i.e., other than fatty) was first introduced into Table 17 as a sub-division of the international title 90 “Other diseases of the heart” (i.e., other than pericarditis, acute endocarditis and myocarditis, and angina pectoris). The deaths at 75 and over so classified in 1921 numbered 1,544 for males out of a total for all forms of heart disease at the same ages of 5,134, corresponding figures for females being 2,418 and 7,992. In 1926 these figures have increased for males to 3,849 and 7,578, and for females to 5,706 and 11,131. Thus the increase in deaths of old men from heart disease, 2,444, is almost entirely accounted for by that of 2,305 from myocardial disease, corresponding increases for old women being 3,139 from heart and 3,288 from myocardial disease. These figures show that the use of such terms as “myocardial degeneration” has much more than doubled within the last five years on the death certificates of the aged, and that apart from such returns the recorded mortality from heart disease is falling in old age as at all other ages, for though since 1921 deaths from heart disease other than those listed to 90 (7) have increased by 4 per cent. for males over 75 (decreasing by 3 per cent. for females) mortality has fallen by 9 per cent. for males and 14 per cent. for females.

There thus appear to be two causes for the increase since 1911–20 of crude mortality from heart disease by 11·4 per cent.

for males and 14·6 for females (Table LII)—(1) ageing of the population, apart from which there would be a decrease in mortality of 4 per cent. for males and 3 for females, and (2) the rapidly growing tendency to record cardiac degeneration in certifying deaths of old people formerly ascribed simply to such causes as "old age," bronchitis, (*see* page 86) etc. So far, in fact, as the records of certification can show, alarmist pronouncements as to increase of mortality from heart disease by "the stress and worry of modern life" may be met by the observation that it is declining at all periods of life. If ages over 75 are excluded from the comparison, as chiefly, but by no means exclusively, affected by the factitious increase of mortality just discussed, the reduction of the standardized rate since 1911–20 is increased to 13 per cent. for each sex.

Table 5 records some changes of interest which are at present going on in regard to these deaths. Precision of statement in certification is at present increasing very rapidly, and so we find that since 1921, when it was first distinguished, the mortality attributed simply to "heart disease," "*morbus cordis*," etc., without further differentiation, has fallen from 316 per million in that year and 328 in 1922 to 228. Similarly, that attributed to "valvular disease" (undefined) has fallen, approximately, from 345 in 1922 to 303. The only form of valvular disease to show any increase since the start of these records in 1921 is that of the aortic valve, the tendency being to diagnose mitral disease less freely in both sexes. "Cardiac dilatation" is another of the less definite forms of return which is now rapidly disappearing from death certificates in favour of a statement of its cause. The mortality so returned amounted to 101 per million in 1907, but is now only 18. On the other hand, the conditions, such as auricular fibrillation, heart block, etc., listed under "disordered action of the heart," are increasing rapidly in record, a mortality of 2 per million so returned in 1911, when these deaths were first distinguished, having grown to 41 (33 for males and 47 for females) in 1926. But quite the most abrupt change in the heart disease records of Table 5 is the rapid increase already described in mortality attributed to myocardial disease (other than fatty, which is declining). This, first distinguished in 1921, has more than doubled in six years, the rate having grown from 254 for both sexes in 1921 to 572 in 1926. Presumably this startling growth is largely due to transfer from other forms of heart disease return, especially mitral disease, dilatation, and *morbus cordis*, as well as to that already discussed from maladies other than cardiac, which alone can explain the increased rate for heart diseases in old age. Changes of this nature are, in fact, proceeding so rapidly that far the best basis for appraisal of change in mortality from heart disease is that afforded by the total for all forms of heart affection, which, as already seen, provides no evidence of any real increase.

91. (b) **Arterio-sclerosis.**—The deaths assigned to this cause numbered 18,423—10,464 of males and 7,959 of females—the corresponding crude rates being 560 per million for males and 391 for females (Table 5). This table shows how rapidly assignment of deaths to this cause is at present increasing, but it also shows that for about one-third of the deaths assigned to it at present, record is also made of some cerebral vascular lesion—hæmorrhage, thrombosis, etc. The effect of this upon the mortality assigned to cerebral hæmorrhage has been already considered (page 84), but while it is certain that the mortality rate for arterio-sclerosis would not be increasing as fast as it is but for this growing elaboration of the certification of cerebral hæmorrhage, it should be noted that the rates for arterio-sclerosis without record of cerebral lesion are increasing quite as fast, in fact a trifle faster, than those with such record. Elaboration in the certification of cerebral hæmorrhage is therefore only a minor factor in the increase of mortality assigned to arterio-sclerosis.

The extent of this increase since 1911, the year when these deaths were first distinguished, is shown in the following table.

Table LIII.—England and Wales, 1911 and 1926. Mortality from Arterio-sclerosis per million living in each year.

			Males.							Females.								
			All Ages		0—	35—	45—	55—	65—	75—	All Ages		0—	35—	45—	55—	65—	75—
			Crude.	Stan'd.							Crude.	Stan'd.						
Rate per Million	1911	137	138	0	12	98	472	1,528	3,592	81	67	—	8	36	195	627	2,231	
	1926	560	454	1	36	228	1,052	4,738	15,390	391	255	1	17	103	524	2,350	9,893	
Per Centage Ratio	1911	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	1926	409	329	—	300	233	223	310	428	483	381	—	213	286	269	375	443	

The mortality (standardized) so returned has increased between three and four times for each sex, rather more for females than for males, during the sixteen years under observation. It is of course impossible to suppose that deaths so caused have increased to anything like this extent in so short a time, so it may be confidently assumed that much the greater part, if not the whole, of the increase is due to the increase of late years of precision in form of certification referred to on page 91. The proportion of these deaths returned at advanced ages has largely increased, as shown by the following comparison of age distribution of deaths in 1911 and in 1926. In these figures the effect of the increased proportion of old men and women in the 1926 population has been discounted by dealing at each period with

the deaths which would have occurred in the standard population of 1901 at the age rates of 1911 and 1926 :

	<i>Males.</i>		<i>Females.</i>	
	1911	1926	1911	1926
0—	0	15	—	27
35—	109	97	150	82
45—	632	447	479	360
55—	2,048	1,384	1,736	1,226
65—	3,667	3,452	3,099	3,042
75—	3,544	4,605	4,536	5,263
	<hr/> 10,000	<hr/> 10,000	<hr/> 10,000	<hr/> 10,000

In both years the deaths are almost confined to ages over 55, but in 1926 their proportions have fallen at ages under and risen at those over 75, more than half those of females now occurring at these advanced ages. During the same period deaths ascribed to "old age" have fallen greatly, despite the increased proportion of aged persons at risk, so it seems likely that many deaths which in 1911 would have been ascribed to old age are now ascribed to arterio-sclerosis. When the large increase due to transfer from cerebral hæmorrhage is also borne in mind, the evidence for real increase of mortality from arterio-sclerosis becomes very doubtful. Concurrently with this increase deaths of males ascribed to arterial hypertension have increased from 25 in 1921 to 63 in 1926, and of females from 20 to 69.

98. Diseases of the Larynx.—The deaths so classified numbered 361, 204 of males and 157 of females. This is the smallest number ever assigned to this cause in any year for males, and almost the smallest for females. Attribution of mortality to this cause is, indeed, rapidly disappearing. It was only in 1917 that these deaths first fell below 1,000, their number in 1916 being 1,071, and not till 1921 was it less than twice that for 1926 (Table 4). In 1901 it was 2,802, of which 831 were assigned to croup, a form of return always till then of numerical importance, but which has now almost disappeared (Table LXIV), and 468 to laryngismus stridulus, at that time classed with diseases of the nervous system, but transferred to the larynx in 1911. The decline is shared by all forms of laryngeal disease distinguished in tabulation.

99. Bronchitis.—The 30,187 deaths allocated to this cause, 7,820 to its acute and 10,519 to its chronic form, this distinction not being recorded for the remaining 11,848, correspond to a death-rate of 773 per million persons living—818 for males and 731 for females.

These rates, all of which are the lowest for any year in Table 5, represent an enormous reduction from those of a few years earlier, even after allowance is made (by reduction of the earlier rates by 2 per cent.) for the transfer of capillary bronchitis to broncho-pneumonia in 1921. This mortality has been falling since 1871–80, when the standardized rate was over 2,000 for each sex. As the effect of standardization for 1921–25 was shown in last year's

Review to be a reduction of 9 per cent. for males and 21 per cent. for females it is evident that the rates returned at present are less than one-third of those met with fifty years ago. Decrease is to be expected as a result of increase of well-being, for it was shown in the recently published Decennial Supplement on Occupational Mortality that mortality from bronchitis is graded to an exceptional extent by social status, from a minimum for the most to a maximum for the least prosperous sections of society.

Table LIV shows that the decline in mortality at each of the four ages there distinguished has now been carried beyond the low level reached in 1923, and that it is greatest in early childhood and, next to this, in later middle life.

Table LIV.—England and Wales, 1911–26. Deaths from Bronchitis at various Ages per million persons living at each age.

	0–	5–	45–	70 and upwards.
1911–20 ...	2,551	78	1,738	15,196
1911 ..	2,573	60	1,665	12,888
1912 ..	2,457	65	1,774	14,889
1913 ..	2,537	66	1,707	14,217
1914 ..	2,481	70	1,689	14,854
1915 ..	2,969	90	2,116	19,144
1916 ..	2,240	77	1,784	16,993
1917 ..	2,282	85	1,744	15,982
1918 ..	2,593	114	1,750	13,626
1919 ..	2,612	90	1,810	16,828
1920 ..	2,799	68	1,367	12,565
1921 ..	1,840	52	1,191	12,538
1922 ..	1,957	64	1,434	15,316
1923 ..	1,332	49	1,142	12,204
1924 ..	1,492	54	1,263	14,066
1925 ..	1,415	51	1,135	13,118
1926 ..	1,168	48	970	10,910

100, 101. **Pneumonia.**—The 32,339 deaths attributed to this disease correspond to a rate of 828 per million, as against 870, the lowest till then for many years, in 1923. The favourable experience of 1926 in regard to bronchitis is therefore duplicated for pneumonia, the standardized rate for which has fallen for males from 1,469 per million in 1901–10 and 1,359 in 1911–20 to 996 in 1926, and for females from 1,056 and 962 in those decades to 710 in 1926. (The earlier rates each include about 5 deaths per million from hypostatic pneumonia, excluded from the 1926 figures). Since 1901–10, when the standardized pneumonia rate was higher than in any of the four preceding decades, it has fallen by 32 per cent. for males and 33 for females.

The fall in pneumonia mortality is not much affected by standardization, reduction in the proportion of young children, whose pneumonia mortality is high, being balanced by increase in that of aged persons, the rate at 75– being much the same as

at 0-5. Consequently the effect of standardization is slight, the crude rate of 986 per million for males being increased to 996, and that of 683 for females to 710.

The proportions of deaths assigned to broncho-, lobar, and undefined pneumonia were as follows in sections of the population classified by degree of urbanization :—

	England and Wales.	London.	County Boroughs.	Urban Districts.	Rural Districts.
Broncho-pneumonia ..	545	581	564	532	492
Lobar pneumonia ..	276	290	272	269	284
Pneumonia undefined ..	179	129	164	199	224
Pneumonia, all forms ..	1,000	1,000	1,000	1,000	1,000

Thus it appears that the proportion of cases of pneumonia defined both as lobar and lobular is highest in London, the former being lowest in the small towns and the latter in the rural districts. The proportion left undefined is, accordingly, lowest in London, and increases with decrease of urbanization to a maximum in the rural districts. These figures concur with much other evidence in indicating that certification is most precise in the large towns, especially London, and least so in the rural districts. But the rapidity with which certification is becoming more precise in this particular may be learnt from Table 4, where it is seen that before 1922 the number of deaths from undefined yearly exceeded that from lobar pneumonia for each sex, and that this ratio has been reversed in each year from 1923 onwards, 1922 showing lobar in excess for males and undefined for females. In 1926 there is considerable excess for lobar pneumonia even in the rural districts. Even since 1925 the proportion of deaths from undefined pneumonia has fallen, for England and Wales, from 19.2 per cent. to 17.9. The rapidity with which the term "pneumonia" (not otherwise defined) is disappearing from death certificates forms a good illustration of the growth of precision in certification referred to on page 91. The forms of the disease were first separately tabulated in 1901, and in 1901-05 the proportions variously returned contrast with those in 1926 as follows :—

	1901-05			1926		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Lobar Pneumonia	916	739	839	3,011	2,420	2,757
Broncho-Pneumonia	3,955	4,534	4,206	5,131	5,880	5,453
(Pneumonia)						
(undefined)	5,129	4,727	4,955	1,858	1,700	1,790
	10,000	10,000	10,000	10,000	10,000	10,000

Both the defined groups have gained at the expense of the undefined, but lobar far more than broncho-pneumonia, thus confirming the view deduced in the Report for 1910 from the first ten years' experience of this transference, and confirmed by other evidence, that undefined is for the most part lobar pneumonia. The reduction of 64 per cent. in the proportion

of "undefined" deaths in 1926 has been added to lobar and broncho-pneumonia in the following percentage shares:—

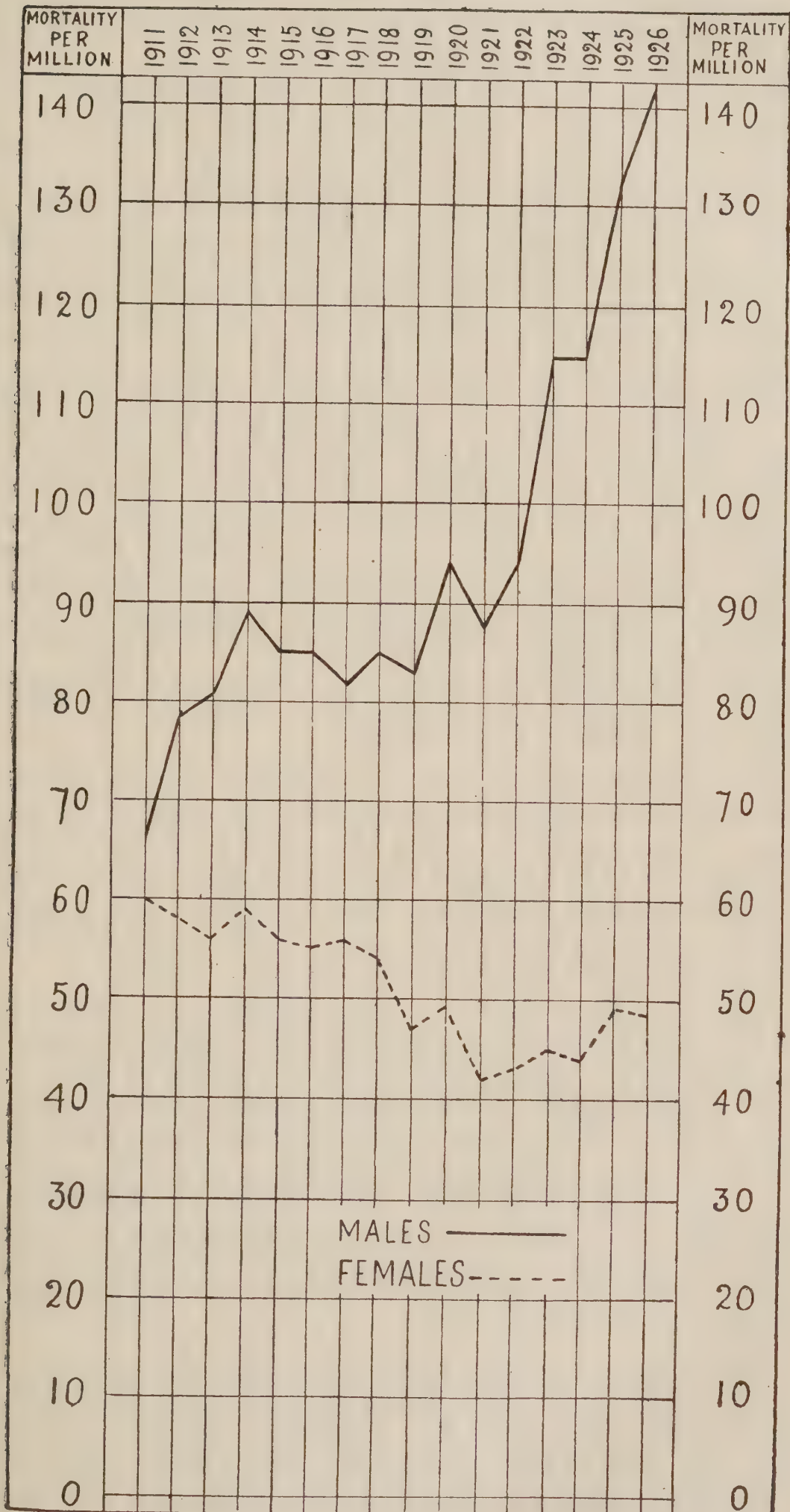
		Males.	Females.	Persons.
Lobar pneumonia	..	64	56	61
Broncho-pneumonia	..	36	44	39

The higher proportion of "undefined" deaths for males at both periods is not necessarily inconsistent with the general tendency towards greater precision of certification for males (*see* page 85), as it must tend to follow from the greater excess mortality of males from lobar than from broncho-pneumonia (Table 5), undefined being chiefly lobar.

As has been the case in each year from 1911 onwards, and probably for many more, mortality from pneumonia was higher for males than for females at each age, the excess being greatest at 35–55, when the rate for males was more than double that for the other sex. This again is a very constant rule, to which the sixteen years 1911–26 provide only four exceptions in all at either of the decennial age periods concerned.

111. Ulcer of the Stomach or Duodenum.—The deaths ascribed to this disease numbered 3,641, 2,661 of males and 980 of females, corresponding to death-rates of 142 per million for males and 48 for females. For males this is the highest rate yet recorded, but higher rates were returned for females in each year from 1911, when the record commences, to 1918. Mortality from both forms of ulcer is at present rising very rapidly for males, and that from duodenal ulcer is rising considerably for females, but their rates for gastric ulcer, though higher in 1925 and in 1926 than in 1921–24, have fallen on the whole steadily and considerably since the commencement of the gastric ulcer record in 1901. The history of the combined mortality from both forms of ulcer since 1911 (when that from duodenal was first recorded), is traced in Diag. 5, which deals throughout with total, not civilian, mortality, and shows that in these sixteen years the rate for males has more than doubled, while that for females has fallen. The rise for males received an obvious check during the years 1915–21, dates which suggest war influence, but from 1922 onwards increase has been very rapid indeed, amounting to no less than 51 per cent. in these four years. The crude rates plotted make no allowance for the effects of the increasing age of the population, but as the deaths are well scattered over the greater part of life, with little incidence on either extreme youth or age, it is not to be expected that standardization could modify Diag. 5 very materially. The effect of standardization is known for 1911–20, when it reduced the rate for males from 83 to 76, and that for females from 55 to 49. The increase for males applies to both forms of ulcer, but its check during the war is more definite for duodenal than for gastric ulcer. The duodenal rate in 1926 is just double that in 1918. Since 1922 this rate has risen sharply also for females, after remaining practically stationary for nine years.

Diagram 5.—England and Wales : Mortality per million living, from Ulcer of the Stomach or Duodenum, 1911–1926.



It seems difficult to explain the change recorded for males in Diag. 5 on grounds other than a sudden real increase of mortality from this cause. As the two forms of return are dealt with jointly the record cannot be affected by transference between them, and if increasing recognition of the condition were responsible for the rise for males the same cause should have led to a rise for females also. A very rapid fall in the recorded gastric ulcer mortality of females during the first dozen years of the century may have been due in part to a change in medical views as to the incidence of this disease, for, as pointed out in the Review for 1923, it was accompanied by a shift of mortality from early to late adult life. Such a change of view would help to account for the fall in female mortality as plotted in Diag. 5, but the fact remains that at most there has been no evidence of increase for females while it has been so rapid for males. It was shown in the recently published Decennial Supplement, Part II, that peptic ulcer mortality increases to some extent from the more to the less prosperous classes, but the difference is not very great, and does not suggest that any explanation of the phenomenon under consideration can be found in change in the prevailing economic conditions. It may be added that during 1901-10, when deaths from gastric but not from duodenal ulcer were distinguished, this form of mortality rose rapidly and steadily for males from 30 to 45 per million, at the same time falling more slowly for females from 63 (69 in 1902) to 57. The gastric ulcer rate for males first exceeded that for females in 1913, and in 1926 the excess has grown to 133 per cent.

117. Appendicitis.—In contrast with that from peptic ulcer, this form of mortality has remained very constant of recent years. It rose rapidly from 38 in 1901, when it was first separately tabulated, to 75 in 1911, but since then it has remained slightly below this level (74 in 1923 and 1925, and 69 in 1926). In every year for which the facts are on record the death-rate has been in considerable excess for males—41 per cent. in 1926.

122. Cirrhosis of the Liver.—This mortality has already been referred to in connexion with alcohol. It is significant that while that returned as alcoholic fell from 10 per million in 1914 to 3 in 1918-20 and in 1926, the remainder, not returned as of alcoholic origin, fell from 102 in 1914 to 40 in 1919, since then rising to 44. This parallelism of movement during the period of restriction of the supply of alcohol provides strong statistical evidence of the importance of alcohol as a factor in the causation of cirrhosis, even when this is not returned in certification as of alcoholic origin. This evidence is abundantly confirmed by the occupational distribution of cirrhosis.

129. Chronic Nephritis.—The crude mortality attributed to this cause, 313 per million males and 270 per million females, may be seen from Table 5 to have been stationary for males since 1921, and to have risen somewhat for females since 1919. Before this it had fallen sharply for both sexes from a maximum

for males (419) in 1915 and for females (335) in 1914. But as this is a disease especially fatal to old people the crude rate tends at present to rise because of the rapid ageing of the population. Mortality is still falling rapidly for each sex at all ages except amongst old women, and in their case its stationary condition at 65–75 and tendency to rise (after an earlier fall) at 75 and over, may be due to the decreasing use of “old age” in certification. These age-group changes are, of course, summarized by that in the standardized rate, which has fallen much more than the crude—from a maximum in 1913 and 1915 of 392 for males to 250 in 1926, and from 287 for females in 1914 to 196. Reduction of the crude rate by standardization has increased for males from 3 per cent. in 1911 to 20 in 1926, and for females from 11 to 27 per cent. The crude rate has, in fact, become during the last few years a very unsafe guide to the movement of forms of mortality with special incidence on old age, and standardization is far more necessary now than in the past.

Before the peak in 1914–15 standardized mortality from this cause had been rising steadily for many years. In 1911–20 it stood at 346 for males and 246 for females. Rates for previous decades back to 1861–70 are recorded in Table 10 of the Supplement to the Seventy-fifth Annual Report, Part III. These refer to acute and chronic nephritis jointly, as defined by a classification differing in detail from the international scheme now followed, but tabulation of the deaths for 1911–20 by both the previous and the present classification renders it possible to determine factors for converting the old rates to the new basis. These are, for males, .854, and for females .817. So treated the standardized rates equivalent to those already quoted for later periods are as follows:—

	1861–70	1871–80	1881–90	1891–1900	1901–10
Males . . .	131	230	311	357	371
Females ..	78	146	217	252	266

Thus from quite small dimensions this mortality had grown, presumably, to a large extent at least, as a result of increasing recognition, to a level in 1901–10 close to the maximum attained about 1914. This was succeeded by a very sudden fall, for males from 392 in 1915 to 288 in 1919, or 27 per cent. in four years, and for females from 287 in 1914 to 198 in 1919, or 31 per cent. in five years. Such a change in so short a period, and occurring between the dates mentioned, inevitably suggests the influence of war conditions, but if so this has been maintained since the peace, for since 1919 the rate for males has further fallen by 13 per cent. and that for females by 1 per cent. It may be recalled that mortality attributed to alcoholism has fallen in a very similar manner, though of course to a much larger extent, during the years of war, and subsequently, like Bright's disease, substantially maintained the low level then reached. The returns compare as follows, using standardized rates for Bright's disease, crude for alcoholism, and deaths, not rates, for the very small mortality attributed to alcoholic nephritis.

		Males.			Females.		
		1914	1919	1926	1914	1919	1926
Chronic nephritis	..	382*	288	250	287	198	196
Alcoholism	..	25	5	4	12	1	2
Alcoholic nephritis	..	28†	10‡	9‡	35†	2‡	2‡
Ratios.							
Chronic nephritis	..	100	75	65	100	69	68
Alcoholism	..	100	20	16	100	8	17
Alcoholic nephritis	..	100	36	32	100	6	6

*392 in 1913 and 1915. †Chronic Nephritis. ‡Acute and Chronic Nephritis.

The *post hoc* fact is at least no argument against a *propter hoc* inference, which would be impossible in its absence, and the parallel here set up suggests that the connexion between alcoholic excess and Bright's disease may be closer than might have been anticipated. Alcohol is commonly regarded both as a contributory cause of Bright's disease and as harmful to those who suffer from it. The latter fact may serve to explain why, if reduction of the supply of alcohol is assumed to account for the sudden fall in mortality from Bright's disease, this commenced as soon as the supply of alcohol was reduced, although its action in inducing the disease is presumably slow. The same explanation may also account for the equally contemporaneous and naturally much greater fall of mortality from cirrhosis of the liver from 130 in 1914 to 54 in 1919 for males and from 96 to 27 for females. In both cases the lives of persons already suffering from the disease may have been prolonged by their enforced temperance.

Further, it should be noted that while the fall during 1914-19 might be the result of any temporary war condition its increase for males and maintenance for females since 1919 suggests the continued operation of some influence established during the earlier period. This applies to the price of alcohol, but to few other war conditions except taxation. Restriction of food, for instance, greatly reduced diabetes mortality in later life during the war, but soon after normal supplies were restored the ground gained was gradually lost.

It is true that a latent tendency to decline, in the shape of a diminishing rate of increase, may be noted in the rates quoted for each sex for 1881-1900. But if the rapid growth of 1861-80 was indeed due to increasing recognition of the disease it is possible that this source of increment was becoming exhausted by 1901-10, and that, if drinking habits had remained unchanged, the recorded mortality would have changed but little thereafter.

143-150. **The Puerperal State.**—The number of deaths assigned to pregnancy or childbirth was 2,860 (Tables 4, 17 and LVII), corresponding to a rate of 4·12 per 1,000 (live) births. Inclusion of the 709 deaths in Table LIX raises the proportion to 5·14 deaths stated to have been caused by, or associated with, pregnancy and childbirth for every 1,000 (live) births.

For comparison of the deaths definitely assigned to pregnancy and childbirth with those so classed for years prior to 1911 deduction is required of 173 deaths from puerperal nephritis and albuminuria (Table LVII), which before that date were not distinguished as puerperal. The resultant rate of 3·87 deaths

per 1,000 births is compared in Table LV with similar rates for the preceding thirty-five years, before which the comparability of the figures is doubtful.

Table LV.—England and Wales. Mortality of Women in or associated with Childbirth per Thousand Children born alive, 1891–1926.

Year.	Classification in use from 1911 onwards.				Classification in use before 1911.				Total Maternal Mortality.
	Puerperal Sepsis.	Other Puerperal causes.	Total Puerperal Mortality.	* Non- puerperal causes.	Puerperal Sepsis.	Other Puerperal causes.	Total Puerperal Mortality.	Non- puerperal causes.	
1891–95 ..	—	—	—	—	2·60	2·89	5·49	—	—
1896–1900 ..	—	—	—	—	2·12	2·57	4·69	—	—
1901–05 ..	—	—	—	—	1·95	2·32	4·27	1·29	5·56
1906–10 ..	—	—	—	—	1·56	2·18	3·74	1·26	5·00
1911–15 ..	1·42	2·61	4·03	0·99	1·50	2·31	3·81	1·21	5·02
1916–20 ..	1·51	2·61	4·12	1·68	1·59	2·29	3·88	1·92	5·80
1921–25 ..	1·40	2·50	3·90	1·14	1·48	2·21	3·69	1·35	5·04
1911	1·43	2·44	3·87	1·04	1·52	2·15	3·67	1·24	4·91
1912	1·39	2·59	3·98	0·97	1·47	2·31	3·78	1·17	4·95
1913	1·26	2·70	3·96	0·91	1·34	2·37	3·71	1·16	4·87
1914	1·55	2·62	4·17	0·95	1·63	2·32	3·95	1·17	5·12
1915	1·47	2·71	4·18	1·09	1·56	2·38	3·94	1·33	5·27
1916	1·38	2·74	4·12	0·94	1·47	2·40	3·87	1·19	5·06
1917	1·31	2·58	3·89	0·95	1·39	2·27	3·66	1·18	4·84
1918	1·28	2·51	3·79	3·81	1·35	2·20	3·55	4·05	7·60
1919	1·67	2·70	4·37	1·93	1·76	2·36	4·12	2·18	6·30
1920	1·81	2·52	4·33	1·13	1·87	2·25	4·12	1·34	5·46
1921	1·38	2·53	3·91	1·09	1·46	2·25	3·71	1·29	5·00
1922	1·38	2·43	3·81	1·35	1·46	2·12	3·58	1·58	5·16
1923	1·30	2·51	3·81	1·01	1·38	2·22	3·60	1·22	4·82
1924	1·39	2·51	3·90	1·16	1·48	2·22	3·70	1·36	5·06
1925	1·56	2·52	4·08	1·07	1·62	2·24	3·86	1·29	5·15
1926	1·60	2·52	4·12	1·02	1·64	2·23	3·87	1·27	5·14

* See Table LIX.

After falling steadily from 5·49 in 1891–95 to 3·74 in 1906–10, this mortality has remained stationary, apart from minor fluctuations, during the last 16 years. The chief of these fluctuations occurred in 1919–20, when a sudden outburst of puerperal sepsis in the winter of 1919–20 caused the total rate for each of these years to rise to 4·12. The total puerperal mortality rate for 1926, 4·12 deaths per 1,000 births, compares with 4·08 in 1925, the excess being entirely due to increase under the head of sepsis, while the mortality ascribed to other causes remains unchanged at 2·52.

The sepsis rate for 1926 is higher than any since 1906 (1·75) except those during the 1919–20 epidemic referred to.

The increase of the total rate from 4·08 to 4·12 under the present classification exceeds that from 3·86 to 3·87 under the former because the addition to be made for puerperal nephritis and albuminuria has increased from 0·22 to 0·25.

The distribution throughout the country of the mortality ascribed to childbirth is outlined in Table LVI.

As regards the distinction between town and country, a general tendency may be noted for mortality from sepsis to increase, and for that from other causes to decrease, with urbanization. This is a very constant rule, to which the eight years, 1919–26, for which this table has been published, present no exception for non-septic causes. The sepsis rate for London, however, has been lower than that for the county boroughs in each year from 1920 onwards, and in 1925 the same rate was lower for the small towns than for the rural districts.

Since 1925 the sepsis rate has fallen in the county boroughs and in the rural districts, in both of which, however, it is still higher than for some years before 1925, but in both the smaller towns and in London the 1926 rate is the highest since the 1920 epidemic. The sepsis rate has fallen slightly in the Midlands, but in other sections of the country there is an increase, which in both the North and the South follows a series of two consecutive previous increases from a minimum, for recent years, in 1923.

The all causes rate for Wales exceeds that for any part of England, the excess being greatest for the rural districts, where the Welsh rate has been higher than that for any section of England in each of the eight years compared. As in each of the three preceding years, the Welsh rural rate is the highest in the table. This was the case also in 1921 and in the other three years of the eight it was exceeded only by other Welsh rates, in 1920 and 1922 by the county boroughs, and in 1919 by both county boroughs and smaller towns, but never by any English rate. This Welsh excess is mainly due to non-septic causes, for which the Welsh rural districts have returned the highest rate in the table in six out of the eight years 1919–26, being only exceeded in 1919 by the Welsh urban districts and in 1920 by the Welsh county boroughs. The highest sepsis rate is furnished, for the fifth time in the eight years, by the Welsh county boroughs. In the three other years the Welsh rural districts returned the highest sepsis rate. For each of the eight years, accordingly, Wales has furnished the highest septic as well as the highest non-septic rate in the table.

Table LVI.—Distribution throughout England and Wales of Mortality of Women in Childbirth, per Thousand Children Born Alive, distinguishing Septic and Other Causes, 1926.

—	North.	Mid-lands.	South.	Wales.	England and Wales.
<i>Sepsis.</i>					
London	—	—	1.61	—	1.61
County Boroughs ..	1.76	1.98	1.43	2.06	1.81
Other Urban Districts..	1.91	1.32	1.11	1.47	1.50
Rural Districts	1.60	1.28	1.23	1.61	1.38
All Areas	1.79	1.54	1.40	1.63	1.60
<i>Other Causes.</i>					
London	—	—	1.74	—	1.74
County Boroughs ..	2.81	1.97	2.72	2.51	2.52
Other Urban Districts..	3.34	2.15	2.09	2.97	2.64
Rural Districts	2.69	2.71	2.18	4.37	2.76
All Areas	2.96	2.24	2.03	3.29	2.52
<i>All Causes.</i>					
London	—	—	3.35	—	3.35
County Boroughs ..	4.57	3.95	4.15	4.57	4.33
Other Urban Districts..	5.25	3.47	3.20	4.44	4.14
Rural Districts	4.29	3.98	3.41	5.98	4.15
All Areas	4.75	3.78	3.43	4.92	4.12

Table LVII gives particulars of deaths ascribed to the puerperal state.

Table LVII.—England and Wales, 1926 : Deaths of Women
Classed to Pregnancy and Childbearing.

Cause of Death.	All Ages.	Ages.						
		15—	20—	25—	30—	35—	40—	45 and up- wards
143. Accidents of Pregnancy:—								
(a) Abortion*	86	1	8	15	24	25	11	2
(b) Ectopic gestation	94	—	8	14	30	27	13	2
(c) Other accidents of pregnancy:—								
Accidental hæmorrhage ..	10	—	2	—	3	4	1	—
Ante-partum hæmorrhage ..	62	—	4	9	19	13	15	2
Chorea	6	2	2	1	1	—	—	—
Uncontrollable vomiting ..	51	4	15	7	14	5	6	—
Carneous mole	1	—	—	1	—	—	—	—
Hydatid mole	12	1	3	1	3	2	1	1
Molar pregnancy	1	—	—	—	—	1	—	—
Incarcerated gravid uterus ..	1	—	—	—	1	—	—	—
Retroverted gravid uterus ..	1	—	—	—	—	—	1	—
"Pregnancy" unqualified ..	3	—	—	2	—	1	—	—
144. Puerperal hæmorrhage:—								
Placenta prævia	156	1	7	30	40	53	22	3
Adherent or retained placenta	35	—	5	7	10	7	5	1
Accidental hæmorrhage ..	13	—	2	5	1	3	2	—
Post-partum hæmorrhage ..	135	1	17	29	39	29	18	2
145. Other accidents or abnormalities of childbirth:—								
Contracted pelvis	71	—	15	22	15	16	3	—
Craniotomy	8	—	1	4	1	2	—	—
Cæsarean section (reason unstated)†	5	—	—	1	2	1	1	—
Malpresentation	23	1	1	3	6	8	4	—
Impacted foetus	1	—	—	1	—	—	—	—
Version	4	—	—	1	—	2	1	—
Instrumental delivery	15	—	2	2	4	2	4	1
Rupture of uterus	20	—	1	2	4	5	6	2
Rupture of vagina	1	—	—	—	—	—	1	—
Rupture of bladder	1	—	—	—	1	—	—	—
Laceration of perineum	2	—	1	1	—	—	—	—
Laceration of cervix	3	—	1	1	—	—	1	—
Inversion of uterus	10	1	3	4	2	—	—	—
Sub-involution of uterus ..	1	—	—	1	—	—	—	—
Inertia of uterus	6	—	—	1	4	1	—	—
"Contraction of uterus" ..	1	—	—	—	1	—	—	—
Atresia of os uteri	1	—	—	1	—	—	—	—
Rigid cervix of uterus	1	—	—	—	1	—	—	—
Prolapse and eversion of uterus	1	—	—	1	—	—	—	—
Prolapsed cord	1	—	—	—	—	—	1	—
Abnormal foetus	4	—	—	1	1	2	—	—
Disease of placenta	1	—	—	1	—	—	—	—
Adherent or retained placenta (without hæmorrhage)	5	—	1	3	—	—	1	—
Precipitate labour	2	—	—	—	2	—	—	—
Induced labour for overdue pregnancy	1	—	—	1	—	—	—	—
Difficult and prolonged labour	83	—	10	26	10	25	12	—
Childbirth apart from above complications:—								
With secondary causes as follows:—								
Anæmia	13	—	1	5	—	6	1	—
Cerebral congestion	1	—	1	—	—	—	—	—

* Besides these 86 deaths from abortion there were 222 others from abortion with sepsis, which, in accordance with the international scheme, are classified to puerperal sepsis.

† In addition Cæsarean section was stated to have been performed in the case of 92 deaths included under other headings in this table—Persistent vomiting 1, ante-partum hæmorrhage 2, placenta prævia 6, contracted pelvis 40, atresia os uteri 1, disease of placenta 1, malpresentation 2, ruptured uterus 1, difficult and prolonged labour, 13, puerperal albuminuria and convulsions 16, puerperal sepsis 9—and of 22 other deaths included in Table LIX.

Table LVII.—England and Wales, 1926 : Deaths of Women
Classed to Pregnancy and Childbearing—*continued*.

Cause of Death.	All Ages.	Ages.						
		15-	20-	25-	30-	35-	40-	45 and up- wards.
145. Other accidents or abnormali- ties of childbirth— <i>cont.</i> Childbirth apart from above complications— <i>cont.</i> With secondary causes as follows— <i>cont.</i> :—								
Cerebral anæmia ..	1	—	—	—	—	1	—	—
Endocarditis ..	2	—	—	—	2	—	—	—
Cardiac dilatation ..	3	—	1	—	—	2	—	—
Bronchitis ..	1	—	1	—	—	—	—	—
Broncho-pneumonia ..	5	—	2	—	2	—	1	—
Pneumonia (type not stated) ..	6	—	—	2	2	1	1	—
Pleurisy ..	2	—	—	—	—	2	—	—
Œdema of lungs ..	2	—	1	1	—	—	—	—
Gastric dilatation ..	3	—	—	3	—	—	—	—
Gastro-enteritis ..	2	—	—	2	—	—	—	—
Cystitis ..	1	—	—	1	—	—	—	—
Retention of urine ..	1	—	—	—	1	—	—	—
Without stated secondary cause ..	24	1	5	4	8	2	4	—
146. Puerperal sepsis :—								
scarlet fever with sepsis ..	1	—	—	—	—	1	—	—
streptococcal infection ..	15	—	4	2	5	2	2	—
pneumococcal infection ..	2	—	—	1	—	1	—	—
staphylococcal infection ..	5	—	1	1	2	—	1	—
gonococcal infection ..	5	—	1	2	2	—	—	—
bacillus coli infection ..	1	—	—	1	—	—	—	—
gas gangrene ..	1	—	—	1	—	—	—	—
septic phlegmasia alba dolens, phlebitis, throm- bosis ..	35	—	3	6	9	10	7	—
septic pneumonia ..	5	—	1	1	1	1	1	—
septicæmia ..	598	14	111	173	144	104	46	6
sepsis ..	119	4	22	40	20	22	10	1
septic intoxication, sap- ræmia ..	68	3	13	23	14	10	4	1
pelvic peritonitis ..	11	—	3	2	1	3	2	—
peritonitis ..	62	4	8	15	18	10	7	—
salpingitis ..	7	—	2	1	3	1	—	—
metritis ..	3	—	1	—	—	2	—	—
endometritis ..	13	—	—	6	4	2	1	—
parametritis ..	10	1	1	3	1	2	2	—
perimetritis ..	1	—	—	1	—	—	—	—
erysipelas ..	4	—	2	—	—	1	1	—
pyæmia ..	22	—	4	3	3	7	4	1
pelvic cellulitis ..	18	1	5	5	4	2	1	—
cellulitis ..	5	—	—	1	1	3	—	—
pelvic abscess ..	3	—	2	1	—	—	—	—
blood poisoning ..	1	—	—	—	1	—	—	—
other specified septic con- ditions ..	2	—	—	1	1	—	—	—
“ puerperal fever ” ..	92	1	17	22	20	24	8	—
147. (1) Puerperal phlegmasia alba dolens and phlebitis, not returned as septic ..	25	1	—	9	6	9	—	—
(2) Puerperal embolism and sudden death ..	177	2	21	53	42	32	26	1
148. Puerperal albuminuria and convulsions :—								
Puerperal nephritis, albuminuria, &c. ..	173	2	30	45	30	40	23	3
Puerperal convulsions ..	351	23	69	103	61	56	34	5
149. Puerperal insanity ..	13	—	1	3	2	4	3	—
150. Puerperal diseases of the breast	6	—	2	—	2	2	—	—
Total ..	2,860	69	445	742	651	599	320	34

From Table 18 it may be seen that mortality from puerperal sepsis was highest during the first quarter of 1926, when 326 deaths occurred, as against 293 and 212 in the two succeeding quarters, and 317 in the last quarter of 1925. The number for the last quarter of the year is not yet available, but will apparently be intermediate between those for the first and second.

The records of cases of puerperal fever notified are collated with those of births and deaths in Table LVIII.

The proportion to births of cases notified has increased from 30 in 1924 and 34 in 1925 to 38, the highest recorded for any of the last eight years. Except in the urban districts of the South each of these proportions in Table LVIII is the highest during these eight years, so recent administrative efforts to promote more complete reporting of these cases have evidently borne fruit. The increase is no doubt connected with the issue of an order by the Minister of Health making puerperal pyrexia notifiable as from October 1, 1926, and of a circular in the previous August (1926) pointing out the need for improvement in notification. Even in 1925, however, these coming events had evidently cast their shadows before them, for in 10 out of the 17 sections of the population represented in Table LVIII the rate of notifications was higher also in 1925 than in any of the six preceding years. In view of these facts it seems probable that the increase in mortality from puerperal sepsis may be partly or wholly due to increased recognition—or admission—of the septic nature of cases of puerperal disease. This process, however, must of course tend to decrease puerperal mortality ascribed to other causes, and of this there is as yet no indication.

As in each of the preceding seven years for which this table has been prepared the urban excess of notifications in proportion to births in Table LVIII was much greater than that of deaths in Table LVI, with a corresponding excess for the rural districts of deaths in proportion to cases. Notification is evidently less incomplete in the towns than in the rural districts, but the proportion of deaths to notifications is falling in all classes of area and especially in the rural districts, where its past excess has been most obvious. The fall for England and Wales since 1925 amounts to 8 per cent., and for the rural districts to 24 per cent., but the ratio is still highest for the rural areas. Its fall is doubtless associated with the increase in cases notified.

Table LVIII.—Puerperal Fever, 1926 : Prevalence and Fatality.

	Cases notified per 10,000 Births.					Deaths per 1,000 Cases notified.				
	North.	Mid-lands.	South.	Wales.	England and Wales.	North.	Mid-lands.	South.	Wales.	England and Wales.
London	—	—	43	—	43	—	—	377	—	377
County Boroughs ..	47	54	40	59	49	377	367	359	348	370
Other Urban Districts ..	32	32	24	29	30	594	415	455	507	496
Rural Districts	24	29	29	24	27	659	433	426	658	504
All Areas	39	39	35	34	38	460	396	394	480	425

Table LIX shows the causes of deaths stated to have been complicated by the existence of the puerperal state. The cause of death most largely represented in this table is heart disease (179 deaths, 100 of these being from valvular disease). Next to this come pneumonia (115), phthisis (65) and influenza (62). Of 63 deaths of females at all ages from acute yellow atrophy of the liver and 44 at ages 15–45 (Table 17), 28 are seen to have been associated with pregnancy or childbirth. Nine deaths from scarlet fever—about the usual number—appear in the table.

Table LIX.—England and Wales, 1926 : Deaths of Women not classed to Pregnancy and Childbearing, but returned as associated therewith.

Cause of Death.		All Ages.	Ages.						
			15–	20–	25–	30–	35–	40–	45 and upwards.
7	Measles	1	—	1	—	—	—	—	—
8	Scarlet fever	9	—	4	2	3	—	—	—
9	Whooping cough ..	1	—	—	—	1	—	—	—
11	Influenza	62	1	7	15	19	15	4	1
23	Encephalitis lethargica ..	1	—	—	—	—	1	—	—
24	Meningococcal meningitis ..	1	—	1	—	—	—	—	—
29	Tetanus (bacillary) ..	3	—	—	—	1	2	—	—
31	Tuberculosis of respiratory system	65	1	16	14	18	8	8	—
32	Tubercular meningitis ..	1	—	1	—	—	—	—	—
33	Tuberculosis of intestines and peritoneum ..	2	—	2	—	—	—	—	—
34	Tuberculosis of the vertebral column	1	—	—	—	1	—	—	—
37	Disseminated tuberculosis ..	4	—	2	—	2	—	—	—
38	Syphilis	3	—	1	—	—	2	—	—
41	Non- puerperal septicaemia	2	—	—	—	—	2	—	—
43–49	Cancer	6	—	—	1	1	1	3	—
50	Tumours not returned as malignant	2	—	—	—	—	1	1	—
51	Rheumatic fever	5	2	2	—	1	—	—	—
57	Diabetes	6	—	1	—	—	4	1	—
58 (a)	Pernicious anæmia	18	—	3	2	4	8	1	—
58 (b)	Anæmia	1	—	1	—	—	—	—	—
60 (a)	Exophthalmic goitre ..	2	—	1	—	1	—	—	—
60 (b-3)	Goitre	4	—	1	—	—	—	2	1
61 (1)	Gastric tetany	1	—	—	1	—	—	—	—
63	Diseases of the adrenals ..	2	—	—	1	1	—	—	—
65 (a)	Myelogenous leukæmia ..	1	—	—	—	—	1	—	—
69 (1)	Purpura hæmorrhagica ..	1	—	—	—	—	—	1	—
70 (1)	Cerebral abscess	1	—	1	—	—	—	—	—
71	Meningitis	3	—	—	1	1	—	1	—
74	Cerebral hæmorrhage, apoplexy, &c. ..	3	—	1	—	—	1	1	—
76	General paralysis of the insane	2	—	—	—	2	—	—	—
78	Epilepsy	6	1	1	1	1	2	—	—
84 (3)	Disseminated sclerosis ..	1	—	—	1	—	—	—	—
87	Pericarditis	1	—	—	1	—	—	—	—
88 (1)	Infective endocarditis ..	4	—	1	1	1	1	—	—

Table LIX.—England and Wales, 1926 : Deaths of Women not classed to Pregnancy and Childbearing, but returned as associated therewith—*continued*.

Cause of Death.	All Ages.	Ages.						
		15–	20–	25–	30–	35–	40–	45 and upwards.
88 (2) Other acute endocarditis	10	—	1	5	1	3	—	—
88 (3) Acute myocarditis ..	8	—	—	1	1	4	2	—
89 Angina pectoris ..	1	—	—	—	—	—	—	1
90 (2) Mitral valve disease ..	53	—	8	12	12	11	10	—
90(1.3.4) Other or unspecified valve disease	47	—	11	8	9	14	5	—
90 (5) Fatty heart	13	—	1	2	2	5	2	1
90 (7) Other or unspecified myocardial disease ..	14	—	1	3	1	2	2	5
90 (8) Disordered action of heart	4	—	—	—	2	1	1	—
90 (9) Heart disease undefined	24	—	3	7	6	5	2	1
91 (b) Arterio-sclerosis ..	2	—	—	—	—	1	1	—
92 Embolism and thrombosis (not cerebral) ..	6	—	1	2	3	—	—	—
93 Diseases of the veins ..	8	—	—	—	2	5	1	—
95 Epistaxis	1	—	—	—	—	1	—	—
99 Bronchitis	20	—	1	6	6	3	4	—
100 Broncho-pneumonia ..	23	—	3	6	5	7	2	—
101 (a) Lobar pneumonia ..	69	4	6	17	19	17	5	1
101 (b) Pneumonia (not otherwise defined)	23	—	2	6	9	2	2	2
102 Pleurisy	4	—	—	2	—	2	—	—
105 Asthma	10	—	—	2	4	2	1	1
107 (c) Abscess of lung ..	1	—	—	1	—	—	—	—
111 (a) Ulcer of the stomach ..	9	1	3	1	1	2	1	—
112 (1) Inflammation of the stomach	3	—	—	1	2	—	—	—
113–114 Diarrhoea and enteritis	2	—	—	—	1	—	1	—
117 Appendicitis and typhlitis	9	—	1	3	4	—	1	—
118 (a) Hernia	1	—	—	—	—	1	—	—
118 (b) Intestinal obstruction ..	21	—	4	1	6	10	—	—
119 Visceroptosis	1	—	—	—	—	1	—	—
120 Acute yellow atrophy of liver	28	1	7	7	4	6	3	—
121 Hydatid cyst of liver ..	1	—	—	—	—	1	—	—
122 Cirrhosis of liver ..	2	—	1	—	—	—	1	—
124 Other diseases of the liver	2	—	—	—	2	—	—	—
129 Chronic nephritis ..	35	—	5	4	7	11	6	2
132 Calculus of kidney ..	1	—	—	—	1	—	—	—
137 Cysts and other tumours of the ovary not returned as malignant ..	4	—	—	2	1	—	1	—
138 (2) Pelvic peritonitis of unknown origin	1	—	—	—	1	—	—	—
139 Tumours of the uterus not returned as malignant	11	—	1	1	4	4	1	—
141 Other diseases of the female genital organs..	2	—	—	—	—	1	1	—
155 (1) Acute osteomyelitis of jaw	1	—	1	—	—	—	—	—
155 (2) Chronic osteomyelitis ..	1	—	—	—	—	—	1	—
165–203 Violence	7	—	—	—	3	2	2	—
Total	709	11	109	141	177	173	82	16

Anæsthetics.—The usual annual statement is continued of deaths during or connected with the administration of an anæsthetic. This is obtained by secondary tabulation of these deaths, since the primary tabulation, represented by Table 17, classifies all such deaths to the disease or injury on account of which the anæsthetic was administered.

Table LX.—England and Wales, 1926 : Deaths under or connected with the Administration of various Anæsthetics.

Anæsthetic.	Age.															
	All Ages.	0-	1-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	65-	
Chloroform.. .. . {M.	54	3	3	6	-	2	1	3	4	3	3	5	4	8	9	
.. .. . {F.	47	1	7	-	1	1	8	4	6	4	3	3	3	5	1	
Chloroform and ether {M.	89	3	6	5	3	8	3	8	3	9	3	8	6	13	11	
.. .. . {F.	78	2	3	6	3	2	4	2	10	8	12	8	9	6	3	
Chloroform, ether and ethyl chlorideM.	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
Chloroform, ether and stovaine F.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Chloroform and ethyl chloride .. M.	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
Chloroform and stovaine F.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Ether {M.	105	5	21	13	7	4	3	3	3	5	7	2	7	14	11	
.. .. . {F.	67	3	5	6	1	1	4	6	1	9	2	10	7	8	4	
Ether and ethyl chloride.. .. . {M.	10	1	5	-	1	-	2	-	-	-	-	1	-	-	-	
.. .. . {F.	7	-	2	-	-	-	2	2	-	-	-	1	-	-	-	
Ether and stovaine F.	2	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
Ether and novocaine F.	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	
Ether and a spinal anæsthetic .. {M.	2	1	-	-	-	-	-	-	-	-	-	-	-	1	-	
.. .. . {F.	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	
Ether and a splanchnic injection.. F.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
A.C.E. mixture {M.	9	-	1	-	1	-	-	-	2	-	1	1	-	2	1	
.. .. . {F.	8	-	2	-	-	1	-	1	1	-	-	2	-	1	-	
Ethyl chloride {M.	4	-	1	2	1	-	-	-	-	-	-	-	-	-	-	
.. .. . {F.	3	-	-	3	-	-	-	-	-	-	-	-	-	-	-	
Nitrous oxide {M.	9	1	-	1	-	-	-	1	1	1	-	1	1	1	1	
.. .. . {F.	6	-	1	1	1	-	2	-	-	-	-	-	-	1	-	
Stovaine {M.	3	-	-	-	-	-	-	-	-	-	1	-	1	-	1	
.. .. . {F.	6	-	1	-	-	-	-	1	-	-	1	1	-	-	2	
Novocaine {M.	2	-	1	-	-	-	-	-	-	-	-	-	-	1	-	
.. .. . {F.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Cocaine {M.	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	
.. .. . {F.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Tropococaine F.	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
Borocaine F.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Nopaine] M.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
Kind not stated {M.	15	2	2	3	-	-	-	-	1	-	-	1	-	2	4	
.. .. . {F.	17	1	4	-	-	2	2	1	-	4	-	1	1	1	-	
Total {M.	306	16	41	30	13	14	9	15	14	18	16	19	20	43	38	
.. .. . {F.	250	7	25	16	6	7	22	17	18	26	18	28	23	23	14	

For the seventh time in succession the total number of deaths in Table LX (556) is considerably higher than in any of the earlier years since 1910, for which alone the complete figures are available. In these earlier years, 1911–1919, the number of these deaths varied only between 261 in 1915 and 306 in 1916. But in 1920 it rose to 366. Since then there have been two further sudden rises, from 336 in 1922 to 446 in 1923, and from 442 in 1925 to 556 in 1926. For the years before 1911 the record is contained in the tables of accidental deaths, but certain causes—strangulated hernia and cancer—were at this time preferred in tabulation to the anæsthetic used. In 1926 the 556 deaths included 53 associated with cancer, and 45 with hernia. So for comparison with the years prior to 1911 the number of deaths should be reduced to 458. But during 1901–10 the deaths ranged from 133 (1901) to 234 (1910).

Subject to allowance, on the scale indicated by this reduction, for the more comprehensive nature of the figures from 1911 onwards, the records of the present century may be compared as in Table LXI.

Table LXI.—England and Wales : Deaths under or associated with Anæsthesia, 1901-26.

Year.	Males.									Females.								
	All ages	0-.	5-.	15-.	25-.	35-.	45-.	55-.	65-.	All ages	0-.	5-.	15-.	25-.	35-.	45-.	55-.	65-.
Yearly average :																		
1901-05	*95	14	20	9	13	16	11	7	4	53	6	9	7	11	8	8	3	2
1906-10	*125	26	20	12	16	18	16	9	8	77	7	14	9	18	11	10	4	3
1911-15	167	30	23	14	20	28	24	16	10	116	14	17	15	16	22	18	10	5
1916-20	188	36	25	25	27	22	20	19	13	119	11	16	14	21	22	17	7	9
1921-25	229	40	28	20	18	27	36	37	24	169	20	17	17	30	29	25	17	12
1921 ..	204	30	29	16	16	19	34	30	30	133	16	23	16	24	21	19	11	8
1922 ..	185	29	21	16	9	27	30	35	18	151	16	15	12	29	31	26	12	10
1923 ..	262	45	37	29	17	38	35	34	27	184	22	23	14	23	32	32	23	15
1924 ..	245	51	30	21	25	21	42	39	16	184	26	11	30	29	31	21	18	18
1925 ..	249	43	25	17	23	28	39	45	29	193	22	14	15	43	32	29	23	15
1926 ..	306	57	43	23	29	34	39	43	38	250	32	22	29	35	44	51	23	14

* Excluding deaths from cancer and strangulated hernia—see above.

Deaths in later periods compared with those of 1901-05 taken as 100.

Yearly average :																		
1901-05	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1906-10	132	186	100	133	123	113	145	129	200	145	117	156	129	164	138	125	133	150
1911-15	176	214	115	156	154	175	218	229	250	219	233	189	214	145	275	225	333	250
1916-20	198	257	125	278	208	138	182	271	325	225	183	178	200	191	275	213	233	450
1921-25	241	286	140	222	138	169	327	529	600	319	333	189	243	273	363	313	567	600
1921 ..	215	214	145	178	123	119	309	429	750	251	267	256	229	218	263	238	367	150
1922 ..	195	207	105	178	69	169	273	500	450	285	267	167	171	264	388	325	400	500
1923 ..	276	321	185	322	131	238	318	486	675	347	367	256	200	209	400	400	767	750
1924 ..	258	364	150	233	192	131	382	557	400	347	433	122	429	264	388	263	600	900
1925 ..	262	307	125	189	177	175	355	643	725	364	367	156	214	391	400	363	767	750
1926 ..	322	407	215	256	223	213	355	614	950	472	533	244	414	318	550	638	767	700

The increase applies to both sexes and to all ages, and has been, on the whole, steadily progressive throughout the twenty-six years covered by the table. It has been greater for females than for males, and in early childhood and in later life than during

the intervening years. In 1926 deaths of females were in excess at each age 15–55, and of males at other ages. Excess for females at 25–45 has been frequent for many years, but no previous case of continuous female excess for so many years of age as in 1926 occurs in the table.

Some of the changes which have occurred during the present century in regard to deaths under anæsthesia are recorded in Table LXII.

Table LXII.—England and Wales : Deaths at various Ages under different Types of Anæsthetics, 1901–26.

Chloroform.							Ether.					
Age.	1901–05.	1906–10.	1911–15.	1916–20.	1921–25.	1926.	1901–05.	1906–10.	1911–15.	1916–20.	1921–25.	1926.
0– ..	69	89	95	72	69	14	2	6	13	27	82	34
5– ..	103	89	99	81	54	7	7	5	12	16	75	27
15– ..	47	43	58	64	35	12	5	6	11	26	48	12
25– ..	69	86	77	84	58	17	6	15	19	29	44	13
35– ..	74	70	125	85	54	13	9	11	26	27	65	23
45– ..	46	60	72	49	50	15	7	7	22	37	73	26
55– ..	33	32	38	37	52	13	2	6	15	28	64	22
65– ..	21	21	23	20	32	10	1	4	10	17	35	15
All ages ..	462	490	587	492	404	101	39	60	128	207	486	172
Chloroform and Ether.							Alcohol Chloroform and Ether (A.C.E. mixture).					
0– ..	2	9	24	40	81	14	—	1	7	8	9	3
5– ..	1	6	16	38	49	17	2	3	8	8	6	1
15– ..	2	7	16	38	62	17	1	1	3	4	1	1
25– ..	3	6	14	47	78	23	3	3	7	4	9	4
35– ..	2	7	22	43	82	32	4	4	5	7	14	1
45– ..	1	6	21	46	103	31	3	1	6	1	6	3
55– ..	1	4	15	21	73	19	—	—	3	3	11	3
65– ..	—	4	9	24	53	14	2	1	1	3	6	1
All ages ..	12	49	137	297	581	167	15	14	40	38	62	17

Proportion in each case per cent. of all Deaths from Anæsthetics of stated Type.

Chloroform.							Ether.					
0– ..	90	82	66	46	26	17	3	6	9	17	31	43
5– ..	90	82	69	53	27	11	6	5	8	10	37	44
15– ..	77	67	62	45	21	25	8	9	12	18	29	25
25– ..	80	72	62	48	28	27	7	13	15	17	21	21
35– ..	82	73	70	51	23	18	10	11	15	16	27	31
45– ..	78	79	53	35	19	17	12	9	16	27	28	30
55– ..	92	76	51	38	22	21	6	14	20	29	27	35
65– ..	88	62	47	29	21	21	4	12	20	25	23	31
All ages ..	84	76	62	45	23	19	7	9	14	19	28	33
Chloroform and Ether.							Alcohol Chloroform and Ether (A.C.E. mixture).					
0– ..	3	8	17	25	31	17	—	1	5	5	3	4
5– ..	1	6	11	25	24	27	2	3	6	5	3	2
15– ..	3	11	17	27	37	35	2	2	3	3	1	2
37– ..	3	5	11	27	37	37	3	3	6	2	4	6
35– ..	2	7	12	26	35	43	4	4	3	4	6	1
45– ..	2	8	16	33	40	36	5	1	4	1	2	3
55– ..	3	10	20	22	31	30	—	—	4	3	5	5
65– ..	—	12	18	35	35	29	8	3	2	4	4	2
All ages ..	2	8	15	27	34	32	3	2	4	3	4	3

This table includes those deaths only which were associated with the exclusive administration (so far as stated) of one of the four named types of anæsthetic. Thus for 1926 it includes 457 deaths, 87 per cent. of the total (524, Table LX) for which the type of anæsthetic was stated. Details of the remaining 67 deaths, where some anæsthetic other than the four dealt with was in use either independently or in conjunction with chloroform or ether, may be found in Table LX.

At the commencement of the century 84 per cent. of the total fatalities for which the type of anæsthetic used was recorded were associated with the exclusive use of chloroform, but in 1926 this proportion has fallen to 19 per cent. This reduction, which applies in very similar degree to all ages, has been uninterrupted in its progress. The place of chloroform has been taken by ether, and chloroform and ether, the small proportion for which A.C.E. mixture is responsible altering but little. The ether fraction of the total stated has increased at all ages and at all periods as the chloroform fraction has fallen, but the proportion for chloroform and ether was slightly less in 1926 than in 1921-25. It need scarcely be pointed out that these proportions must depend upon the selection of anæsthetic agents as well as upon the risk attaching to them. But unfortunately the deaths associated with each type of anæsthetic cannot be collated with the number of its administrations. It is not even possible to say whether, or to what extent, if any, the rapid increase in the number of these deaths implies increased mortality under anæsthetics. On the one hand the number of administrations is known to be increasing very rapidly, but on the other it might have been expected that the abandonment of chloroform in favour of the much safer ether, of which Table LXII shows such strong evidence, would have led to a large reduction in the deaths if the number of administrations had remained the same. But the deaths tabulated can only be those under, not those caused by, anæsthesia. It is impossible from certification to distinguish between deaths from operation under anæsthesia and deaths due to the anæsthetic itself, and, this being so, it seems possible that the increase of this type of death may be partly dependent upon increase of boldness in operative surgery.

The conditions calling for anæsthesia in these cases are stated on pages 111-113, the list being arranged in the order of the titles of the International List to which the deaths were assigned (commencing with No. 10, Diphtheria).

Conditions for which Anæsthetics were administered and the number of deaths in each case.

10. Diphtheria (5). 16. Dysenteric ulcerative colitis (1).
27. Anthrax abscess in abdomen (1). 31. Pulmonary tuberculosis (3). 32. Tuberculoma of cerebellum (1). 34. Tuberculous—osteomyelitis of spine (1), retro-pharyngeal abscess (1).

35. Tuberculosis of—hip joint (1), knee (1). 36. Tuberculous—glands of neck (3), inguinal glands (1), testis (1), salpingo-öophoritis (1), renal abscess (1). 38. Syphilitic—stricture of trachea (1), cirrhosis of liver (1). 41. Septicæmia (2). 43–49. Cancer of—lip (1), tongue (5), palate (2), mouth (1), tonsil (1), tonsil and pharynx (1), stomach (5), colon (5), intestine (3), rectum (5), ovary (1), cervix uteri (3), uterus (2), breast (3), face (1), penis (2), skin of neck (1), larynx (4), pancreas (1), glands of neck (3), pelvis (1), abdomen (1), throat (1). 50. Papilloma of—bladder (1), vocal cord (1); tumour of—chest (1), humerus (1). 52. Osteo-arthritis (1), chronic arthritis (1). 57. Diabetic gangrene (2). 59. Removal of pituitary body (1). 60. Exophthalmic goitre (5), goitre (2). 64. Splenomegaly (1). 65. Lymphadenoma (1). 69. Purpura hæmorrhagica (1). 70. Cerebral abscess (2). 71. Meningitis (2). 73. Spastic paraplegia (1). 78. Epilepsy (1). 84. Glioma (1), cerebellar cyst (1). 85. Operation on—lachrymal duct (1), drooping eyelid (1), cataract (1). 86. Mastoid disease (8), middle ear disease (3), abscess of ear (1). 91. Atheroma of coronary arteries (1). 93. Hæmorrhoids (3), sapheno-varix (1). 95. Internal hæmorrhage (1). 97. Deviation of septum (6),—and polypi (1), abscess of antrum of Highmore (2). 98. Laryngitis (2), œdema of glottis (1). 101. Pneumonia (1). 102. Empyema (11). 107. Chronic interstitial pneumonia (1), abscess of lungs (2), abscess of trachea (1). 108. Extraction of teeth (8), salivary calculus (1), Ludwig's angina (3), parotid abscess (1). 109. Enlarged tonsils and (or) adenoids (32), of which 2 with deviation of septum and 1 with polypus, retro-pharyngeal abscess (2). 111. Gastric ulcer (16), duodenal ulcer (8). 112. Pyloric obstruction (1). 113 and 114. Hæmorrhagic gastro enteritis (1). 117. Appendicitis (52). 118. Strangulated hernia (16), "hernia" (29), intestinal obstruction (26). 119. Fistula in ano (1), diverticulitis (2). 120. Acute yellow atrophy of liver (2). 122. Cirrhosis of liver (1),—epiplopepy (1), fatty degeneration of liver (1). 123. Gallstones (10). 124. Cholecystitis (7), abscess of liver (1), infection of bile passages (1). 125. Hæmorrhagic pancreatitis (1). 126. Peritonitis (7). 129. Renal disease (1). 131. Abscess of kidney (3), cystic kidney (1). 132. Renal calculi (4). 133. Perforating ulcerative cystitis (1), diverticulum of bladder (1). 134. Stricture of urethra (3). 135. Enlarged prostate (12). 136. Circumcision (9), septic phimosis (1), hydrocele (2). 137. Ovarian cyst (4), cystic tumour of ovary (1). 138. Salpingitis (1), pyo-salpinx (1), abscess of pelvis (2). 139. Fibroid tumour of uterus (13), tumour of uterus (2), polypus of uterus (1). 140. Menorrhagia (1), uterine hæmorrhage (1). 141. Metritis (1). 143. Miscarriage (2), retained products of conception (1), premature confinement, removal of afterbirth (1), ruptured ectopic gestation (1). 144. Adherent placenta with hæmorrhage (1), hæmorrhage during childbirth (1). 145. Childbirth (3), instrumental delivery (10), difficult labour (9), Cæsarean section, reason not stated (1), lacerated perineum (1), prolapsed cord (1). 146. Parametric

abscess (1), puerperal sepsis, exploration of uterus (1). 148. Eclampsia (2), toxæmia of pregnancy, instrumental delivery (2), nephritis of pregnancy (1). 153. Cellulitis of foot (1), abscess—behind ear (1), under arm (1); pyogenic abscess of neck (1). 155. Osteomyelitis (3), abscess of lower jaw (1), bone grafting (1). 156. Suppurative arthritis of knee (1), manipulation of ankle joints (1), adhesions of hip joints, straightening of legs (1). 158. Bunion (1), hammer toes (1), flexed and contracted fingers (1). 159. Plastic operation on eyelid (1), club-feet (2), cleft palate (5), hare lip (2), nævus of scalp (1). 165–203. Various forms of violence (34). 205. Laparotomy, cause not stated (3), operation, cause not stated (2).

Owing to the increase in the number of deaths it is no longer practicable to distinguish sex and age of decedents, as heretofore, and the name of the condition calling for anæsthesia is now followed simply by the total number of deaths in each case. Of the grand total of 556, 53 were associated with cancer, 7 with goitre, 8 mastoid disease, 8 extraction of teeth, 32 enlarged tonsils and (or) adenoids, 16 gastric and 8 duodenal ulcer, 52 appendicitis, 45 hernia, stated in 16 cases to have been strangulated, 26 intestinal obstruction, 10 gallstones, 12 enlarged prostate, 13 fibroid tumour of uterus, 39 parturition, and 34 with injury.

The proportion of these deaths reported from different classes of institutions, etc., in various sections of the country, is stated in the following table, in which, as place of occurrence is evidently of more interest for these deaths than place of residence, they have been tabulated by area of registration, the registration counties of former Annual Reports (before 1911) being grouped into five sections of the country on the lines indicated in the footnote to Table V.

Table LXIII.—Deaths under Anæsthetics in 1926. Distribution by Part of the Country and Place of Occurrence.

	Hospitals.	Poor Law Institutions.	Mental Hospitals.	Nursing Homes.	Elsewhere (privat houses)	Total.
North .. { M.	79	3	—	5	4	91
{ F.	69	11	—	3	8	91
Midlands { M.	72	5	1	2	4	84
{ F.	37	7	1	4	10	59
London .. { M.	66	11	—	2	2	81
{ F.	47	6	—	3	3	59
Remainder of South { M.	31	1	—	1	1	34
{ F.	21	2	1	1	6	31
Wales .. { M.	15	—	—	—	1	16
{ F.	7	1	—	1	1	10
England and Wales { M.	263	20	1	10	12	306
{ F.	181	27	2	12	28	250

The features of this table are much as for 1925, the first published. Of the total deaths 80 per cent. occurred in hospitals, 8 in Poor Law Institutions, 4 in nursing homes, 1 in asylums, and only 7 per cent. elsewhere. Deaths of males were in large excess in hospitals, but of females elsewhere, especially in private houses, where many of the 39 deaths noted above as connected with puerperal conditions doubtless occurred. In all parts of the country deaths of males were in excess in hospital practice, and in all except London, deaths of females were more numerous in Poor Law practice. In the North total deaths were equal for the sexes, but in all other parts of the country there was excess, generally large, for males. The total deaths have increased since 1925 in all parts of the country except the extra-metropolitan South, where they have fallen from 66 to 65. These increases are—Wales, 73 per cent. ; Midlands, 46 ; North, 32 ; and London 12 per cent.

Status Lymphaticus and Anæsthetics.—In addition to the 166 deaths from status lymphaticus primarily classified to diseases of the thymus in Table 17, there were 50 deaths under anæsthetics in the case of which record was made of the presence of this condition, but which have been referred in tabulation to the condition occasioning the administration of the anæsthetic.

The sex and age distribution of these was as follows :—

			All Ages.	0—	5—	10—	15—	20—	25—	35—
Males	..	..	36	20	9	1	2	1	3	—
Females	..	..	14	6	5	1	—	1	—	1

204, 205. **Ill-defined Causes of Death.**—These headings in the International List of Causes of Death, to which 1,406 deaths have been allocated, exclude the ill-defined diseases of infancy and old age, 160 (1) and 164 (2). In the more comprehensive sense resulting from their inclusion, the deaths from ill-defined causes in 1926 numbered 27,889, or 6·15 per cent. of the total, as compared with 6·21 in 1925 and 9·67 in 1911.

Inquiries sent to medical practitioners and coroners requesting further information as to indefinitely certified deaths amounted to 7,820, and to these 7,073 replies were received, with results to classification, some of the most important of which are set out in Table LXIV.

Unfortunately these replies relate to only 1·56 per cent. of the year's deaths, or but a small fraction of those regarding which additional information would be desirable.

Table LXIV.—England and Wales, 1926: Replies to Inquiries respecting Indefinitely Certified Causes of Death.

Subject of Inquiry.	Replies received.	Replies amplifying previous information.	Deaths allocated as the result of inquiry to various important headings.
Croup	32	31	Diphtheria 4, Laryngismus stridulus 1, Laryngitis 12.
Membranous laryngitis	6	6	Diphtheria 4.
Pyæmia, septicæmia, etc.	173	151	Measles 2, Scarlet fever 1, Syphilis 4, Diseases of the teeth and gums 11, Puerperal sepsis 13, Diseases of the skin 14.
Tuberculosis ..	145	142	Tuberculosis of the respiratory system 91, Tuberculosis of the intestines and peritoneum 9, Tuberculosis of nervous system 5, Disseminated tuberculosis 21, Other forms of tubercle 15.
Cancer (part or organ not stated) ..	1,175	1,078	Part or organ stated in 1,071 cases.
Tumour, growth, etc.	643	604	Syphilis 8, Cancer 418.
Rheumatism ..	209	207	Rheumatic fever 73, Chronic rheumatism 6, Osteo-arthritis 9.
Encephalitis ..	178	160	Influenza 7, Polioencephalitis 5, Encephalitis lethargica 58, Meningococcal meningitis 2, Tuberculosis of nervous system 6, Syphilis 2, Other forms of encephalitis 49, Meningitis 4.
Basal or basic meningitis	51	45	Meningococcal meningitis 14, Tuberculosis of nervous system 16, Syphilis 1, Meningitis—other forms 8.
Posterior or post, basal or basic meningitis	73	70	Meningococcal meningitis 46, Tuberculosis of nervous system 12, Meningitis—other forms 9.
Cerebro-spinal meningitis	131	127	Meningococcal meningitis 97, Tuberculosis of nervous system 8, Meningitis—other forms 12.
Spinal sclerosis ..	40	37	Syphilis 2, Tabes dorsalis 2, Other diseases of spinal cord 7, Disseminated sclerosis 23.
Cerebral sclerosis ..	33	33	Disseminated sclerosis 9, Arterio-sclerosis 24.
Paraplegia	43	35	Syphilis 4, Diseases of the spinal cord 16, Cerebral hæmorrhage, apoplexy 3.
General paralysis (outside asylums) ..	53	47	Cerebral hæmorrhage apoplexy 2, General paralysis of the insane 37, Paralysis agitans 2.
Paralysis	18	12	Diseases of spinal cord 5, Cerebral hæmorrhage, apoplexy 1.
Fibroid phthisis ..	88	75	Tuberculosis of respiratory system 49, Chronic interstitial pneumonia 18.
Hæmoptysis	37	35	Tuberculosis of respiratory system 18
Stomatitis	27	27	Syphilis 4, Thrush, aphthous stomatitis 10.
Stricture of œsophagus	35	30	Syphilis 1, Cancer 20.

Table LXIV.—England and Wales, 1926 : Replies to Inquiries respecting Indefinitely Certified Causes of Death—*continued*.

Subject of Inquiry.	Replies received.	Replies amplifying previous information.	Deaths allocated as the result of inquiry to various important headings.
Hæmatemesis ..	44	36	Cancer 4, Ulcer of the stomach or duodenum 18, Cirrhosis of liver 3.
Pyloric obstruction, stenosis, etc. ..	36	32	Cancer 14, Ulcer of the stomach or duodenum 14.
Jaundice	68	55	Cancer 15, Cirrhosis of liver 4, Biliary calculi 9.
Peritonitis	151	114	Tuberculosis of peritoneum, etc., 9, Cancer 3, Ulcer of the stomach or duodenum 10, Appendicitis 33, Intestinal obstruction 3, Diseases of female genital organs 8, Puerperal sepsis 1.
Pemphigus (of infants)	176	159	Syphilis 48, Diseases of the umbilicus 4.
Hydrocephalus ..	81	72	Tuberculosis of nervous system 7, Syphilis 1, Congenital hydrocephalus 41.
Violence	432	422	Precise form of suicide 91, Injury by drowning 10, Injury by fall 57, Injury in mines and quarries 36, Injury by machines 9, Injury by crushing 88.
Ascites, dropsy ..	10	7	Diseases of the heart 7.
Syncope, heart failure (ages 1-70) ..	122	112	Influenza 2, Tuberculosis of the respiratory system 2, Cancer 2, Rheumatic fever 3, Diseases of the heart 69, Arterio-sclerosis 10, Bronchitis 6.
Operation	354	345	Cancer 38, Tonsillitis 8, Ulcer of the stomach or duodenum 29, Appendicitis 16, Hernia, intestinal obstruction 30, Biliary calculi 29, Diseases of the prostate 16, Ovarian tumour 9, Uterine tumour 37, Violence 4.
Other indefinite forms of certificate ..	2,409	2,170	—
Total ..	7,073	6,476	—

The total additions to certain definite headings resulting from these enquiries were as follows:—To influenza 48; to encephalitis lethargica 66; to meningococcal meningitis 160; to tuberculosis of the respiratory system 222; to tuberculosis of the nervous system 62; to other forms of tuberculosis 109; to venereal diseases 210; to cancer 619; to diseases of the spinal cord 51; to general paralysis of the insane 48; to disseminated sclerosis 36; to arterio-sclerosis 110; to ulcer of the stomach or duodenum 118; to appendicitis and typhlitis 74; to biliary calculi 53; to diseases of the prostate, 52; to puerperal sepsis 63; and to congenital malformations 70.

INQUESTS AND UNCERTIFIED DEATHS* IN 1925.

From 1915 onwards it has been customary to report upon methods of certification every fifth year in greater detail than was to be found in the annual tables dealing with this matter previously published. The following tables relating to 1925 were prepared under this scheme, but as they did not appear in the Review for that year they are shown here in order to maintain the continuity of the series.

Such change as has occurred in certification during the past 45 years is outlined in Table LXV.

Table LXV.—England and Wales : Certified and Uncertified Deaths and Inquest Cases, in 1881–1910 and in 1915, 1920 and 1925.

			Proportion per 100 Deaths.		
			Certified by Registered Medical Practitioners.	Inquest Cases.	Uncertified Deaths.
1881–85	..	..	90·86	5·38	3·76
1886–90	..	..	91·34	5·55	3·11
1891–95	..	..	91·58	5·86	2·56
1896–1900	..	..	91·76	6·25	1·99
1901–05	..	..	91·56	6·73	1·71
1906–10	..	..	91·54	7·03	1·43
1915	..	..	91·67	6·96	1·37
1920	..	..	92·14	6·65	1·21
1925	..	..	92·08	6·91	1·01

In this table the quinquennial proportions entered have been condensed from those for single years previously published by simply averaging the rates, which change but little from year to year. That for uncertified deaths continues to fall slowly, the 1 per cent. now returned being the lowest in the table, and only about one fifth as large as fifty years earlier. It has been lessened by increase both of medical certifications and of inquests, but especially the latter.

The facts recorded as to the 32,669 deaths on which inquests were held are summarized in Tables LXVI and LXXI.

The features of these tables so closely resemble those of their predecessors that they may be placed on record for reference without comment. This applies also to the presentation in Tables LXVII and LXXI of the corresponding facts regarding “uncertified” deaths.

* Deaths for which no medical certificate of cause nor inquest verdict is supplied.

Table LXVI.—England and Wales : Inquest Cases registered
Cause of

International List Number.	Cause of Death.	Total.	Males.	Females.	Non-Civilians.	Civilians.			
						London.	County Boroughs.	Urban Districts.	Rural Districts.
1—42	Infectious diseases	1,272	876	396	2	231	504	368	167
43—69	Other general diseases	716	415	301	1	125	277	206	107
70—86	Nervous diseases	1,736	979	757	1	240	707	519	269
87—96	Circulatory diseases	5,529	3,450	2,079	7	1,221	2,048	1,563	690
97—107	Respiratory diseases	2,061	1,223	838	—	424	994	464	179
108—127	Digestive diseases	1,041	629	412	3	170	393	324	151
128—142	Non-venereal diseases of the genito- urinary system—								
	Males	258	258	—	—	60	113	58	27
	Females	201	—	201	—	52	89	40	20
143—150	The puerperal state	202	—	202	—	53	77	40	32
151—154	Diseases of the skin, etc. ..	120	83	37	—	15	59	33	13
155—158	Diseases of the bones, etc. ..	87	66	21	—	12	38	24	13
159—163	Malformations: infantile diseases	767	412	355	—	121	312	205	129
164	Old age	374	191	183	—	4	197	89	84
165—203	Violence	17,898	12,581	5,317	148	2,220	5,927	5,921	3,682
204, 205	Ill-defined and unstated causes ..	407	264	143	1	20	152	116	118
	Total	32,669	21,427	11,242	163	4,968	11,887	9,970	5,681
7	Measles	26	11	15	—	4	17	8	2
9	Whooping cough	31	20	11	—	8	9	7	7
10	Diphtheria	25	13	12	—	3	13	6	3
11	Influenza	154	97	57	—	23	61	48	22
21	Erysipelas	47	31	16	—	6	27	10	4
29	Tetanus	115	91	24	—	19	32	40	24
31	Phthisis	337	242	95	—	88	137	82	30
32—37	Other tuberculous diseases ..	149	93	56	—	27	59	49	14
38	Syphilis	41	27	14	—	15	19	6	1
41	Septicæmia	290	206	84	—	26	103	106	55
43—49	Cancer	284	176	108	—	73	113	72	26
57	Diabetes	54	24	30	—	8	28	12	6
62	Thymus disease	116	74	42	—	21	34	36	25
66	Alcoholism	57	31	26	—	4	19	26	8
70	Encephalitis	33	20	13	—	7	17	7	2
74	Cerebral hæmorrhage, etc. ..	850	461	389	—	133	367	231	119
78	Epilepsy	257	151	106	—	29	67	100	61
79, 80	Convulsions	311	170	141	—	15	151	94	51
89	Angina pectoris	211	161	50	—	18	73	90	30
90 (1)—90 (4)	Valvular disease of heart ..	1,404	881	523	—	333	515	378	178
90 (5)	Fatty disease of heart	1,054	558	496	1	283	346	294	130
87, 88, } 90 (6)—90 (9)	Other diseases of heart	1,467	888	579	4	189	561	477	236
91 (a)	Aneurysm	306	227	79	—	84	115	76	31
91 (b)	Arterio-sclerosis	961	660	301	1	289	389	218	64
99	Bronchitis	462	240	222	—	76	270	91	25
100	Broncho-pneumonia	488	253	235	—	138	198	113	39
101	Pneumonia	854	556	298	—	185	417	182	70
113 and 114	Diarrhoea	169	91	78	—	32	64	53	20
117	Appendicitis	77	44	33	1	16	24	24	12
118	Hernia, intestinal obstruction ..	183	104	79	—	29	57	63	34
122	Cirrhosis of liver	57	34	23	—	14	30	13	—
129	Chronic nephritis	341	192	149	—	83	163	66	29
153 (1)	Cellulitis	78	60	18	—	9	41	17	11
155 (1)	Acute osteomyelitis	64	53	11	—	8	30	17	9
159	Congenital malformations ..	115	62	53	—	23	43	27	22
161 (1)	Premature birth	137	70	67	—	24	60	36	17
161 (2)	Injury at birth	93	49	44	—	16	32	29	16
162 (2)	Atelectasis	99	60	39	—	10	61	20	8
163	Lack of care	226	115	111	—	39	80	73	34
165—174	Suicide	4,084	2,852	1,232	30	543	1,392	1,345	774
175—203	Other violence	13,814	9,729	4,085	118	1,677	4,535	4,576	2,908
204—205 (2)	Ill-defined causes	338	224	114	1	9	126	100	102
205 (3)	Cause not stated	69	40	29	—	11	26	16	16

n 1925 classified by Sex, Age, Class of Area, and assigned
Death.

Ages.										International List Number.
0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and upwards.	
65	100	114	163	118	174	217	189	96	36	1-42
94	40	20	34	38	57	127	148	123	35	43-69
278	71	48	108	117	159	267	322	252	114	70-86
3	7	28	96	136	352	936	1,521	1,598	852	87-96
441	181	129	55	46	139	238	266	359	207	97-107
119	77	82	66	92	123	161	156	120	45	108-127
11	6	2	2	11	23	36	74	69	24	} 128-142
1	2	1	8	15	29	48	35	38	24	
—	—	—	42	96	63	1	—	—	—	143-150
5	4	5	13	8	7	30	19	14	15	151-154
—	10	39	18	2	1	5	5	4	3	155-158
748	8	3	1	2	1	3	1	—	—	159-163
684	1,307	1,349	2,112	1,790	2,026	2,685	2,395	1,911	1,639	164
39	6	6	13	19	36	76	127	78	7	165-203
2,488	1,819	1,826	2,731	2,490	3,190	4,830	5,263	4,807	3,225	204-205
8	17	1	—	—	—	—	—	—	—	7
18	10	2	—	—	—	—	—	1	—	9
—	13	10	—	2	—	—	—	—	—	10
4	11	3	14	7	24	36	26	20	9	11
—	3	1	2	3	7	9	11	8	3	21
1	4	24	31	11	15	15	8	6	—	29
4	6	5	39	45	66	67	61	31	13	31
13	27	32	29	15	8	11	12	2	—	32-37
9	—	1	1	6	8	8	2	5	1	38
5	8	24	38	23	36	61	64	21	10	41
—	2	3	6	6	27	58	83	76	23	43-49
—	—	1	1	2	2	9	15	19	5	57
80	16	9	7	3	1	—	—	—	—	62
—	—	—	—	4	10	23	15	4	1	66
2	6	5	7	3	3	4	1	1	1	70
2	2	8	15	41	67	168	244	211	92	74
—	2	13	49	52	52	36	34	13	6	78
265	43	2	—	—	1	—	—	—	—	79, 80
—	—	—	—	1	16	44	74	61	15	89
—	1	9	47	59	108	248	376	375	181	90 (1)-90 (4)
—	—	1	3	18	55	198	325	291	163	90 (5)
2	5	15	33	38	93	179	373	469	260	87, 88, 90 (6)-90 (9)
—	—	1	8	5	24	90	86	63	29	91 (a)
—	—	—	—	9	52	146	262	305	187	91 (b)
45	20	—	2	1	18	49	86	147	94	99
250	79	32	3	9	12	22	23	37	21	100
114	60	85	34	29	84	132	119	130	67	101
57	31	17	10	8	11	11	9	12	3	113 and 114
2	6	14	13	15	6	8	6	5	2	117
24	16	7	6	10	14	28	31	36	11	118
—	—	—	—	4	7	15	18	9	4	122

Table LXVII.—England and Wales : Uncertified Deaths registered
Cause of

International List Number.	Cause of Death.	Total.	Males.	Females.	Non-civilians.	Civilians.			
						London.	County Boroughs.	Urban Districts.	Rural Districts.
1—42	Infectious diseases	205	104	101	—	—	58	69	78
43—69	Other general diseases	116	49	67	—	1	41	48	26
70—86	Nervous diseases	725	410	315	—	3	221	285	216
87—96	Circulatory diseases	827	483	344	—	11	231	314	271
97—107	Respiratory diseases	410	210	200	—	3	176	152	79
108—127	Digestive diseases	110	55	55	—	2	39	43	26
128—142	Non-venereal diseases of the genito- urinary system—								
	Males	14	14	—	—	—	7	6	1
	Females	12	—	12	—	—	3	3	6
143—150	The puerperal state	12	—	12	—	—	3	3	6
151—154	Diseases of the skin, etc.	5	2	3	—	—	3	1	1
155—158	Diseases of the bones, etc.	1	1	—	—	—	1	—	—
159—163	Malformations : infantile diseases	457	253	204	—	4	172	162	119
164	Old age	915	460	455	—	6	217	341	351
165—203	Violence	30	17	13	—	—	7	13	10
204, 205	Ill-defined and unstated causes ..	931	536	395	—	5	207	369	350
	Total	4,770	2,594	2,176	—	35	1,386	1,809	1,540
7	Measles	18	13	5	—	—	5	9	4
9	Whooping cough	29	13	16	—	—	5	13	11
10	Diphtheria	6	4	2	—	—	2	2	2
11	Influenza	71	35	36	—	—	20	20	31
31	Phthisis	66	30	36	—	—	24	21	21
32—37	Other tuberculous diseases	6	4	2	—	—	1	1	4
43—49	Cancer	48	17	31	—	1	17	18	12
57	Diabetes	13	9	4	—	—	3	6	4
71	Meningitis	13	6	7	—	—	2	9	2
74 (a) 1	Cerebral hæmorrhage	192	103	89	—	1	68	78	45
74 (a) 2	Apoplexy (lesion unstated)	76	49	27	—	—	18	30	28
75	Paralysis of unstated origin	15	10	5	—	1	3	4	7
78	Epilepsy	59	35	24	—	1	14	22	22
79 and 80	Convulsions	347	200	147	—	—	114	132	101
89	Angina pectoris	73	58	15	—	—	25	31	17
90(1)—90(4)	Valvular disease of heart	135	82	53	—	2	47	47	39
90 (5)	Fatty heart	35	17	18	—	—	10	16	9
87, 88, } 90(6)—90(9) }	Other heart diseases	512	280	232	—	7	130	194	181
91 (b)	Arterio-sclerosis	42	25	17	—	1	14	15	12
99	Bronchitis	286	148	138	—	2	128	102	54
100	Broncho-pneumonia	41	20	21	—	—	15	14	12
101 (b)	Pneumonia (not otherwise defined)	34	17	17	—	—	16	12	6
105	Asthma	26	12	14	—	1	12	11	2
112 (1)	Inflammation of stomach	21	6	15	—	—	11	5	5
111 (a) and 112 (2)	Other diseases of stomach	21	11	10	—	1	8	4	8
113 and 114	Diarrhœa and enteritis	45	29	16	—	1	13	22	9
118	Hernia and intestinal obstruction	8	2	6	—	—	2	4	2
129	Chronic nephritis	21	11	10	—	—	9	7	5
159	Congenital malformations	32	18	14	—	—	8	10	14
160	Congenital debility, sclerema, etc.	112	59	53	—	1	37	41	33
161 (1)	Premature birth	271	160	111	—	3	108	100	62
161 (2)	Injury at birth	13	4	9	—	—	6	3	4
163	Lack of care	8	5	3	—	—	5	—	3
182	Accidental drowning	2	2	—	—	—	1	—	1
204	Sudden death (1—70)	104	58	46	—	1	28	42	33
205 (1)	Heart failure (1—70)	668	394	274	—	3	152	271	242
205 (2)	Other ill-defined causes	147	79	68	—	—	27	51	69
205 (3)	Cause not specified	12	5	7	—	1	—	5	6

n 1925 classified by Sex, Age, Class of Area, and assigned
Death.

Ages.										International List Number.
0-	1-	5-	15-	25-	35-	45-	55-	65-	75 and upwards.	
32	28	20	20	21	14	19	22	22	7	1—42
—	3	1	2	5	11	15	27	36	16	43—69
289	61	20	16	13	23	47	85	116	55	70—86
2	—	1	9	17	55	127	217	259	140	87—96
62	41	13	6	7	13	22	51	97	98	97—107
18	9	23	4	2	9	13	11	14	7	108—127
—	—	—	1	2	—	5	2	1	3	128—142
—	—	—	1	—	2	3	3	1	2	
—	—	—	1	5	5	1	—	—	—	143—150
—	—	—	—	—	1	2	1	—	1	151—154
—	—	—	—	—	—	—	1	—	—	155—158
455	1	1	—	—	—	—	—	—	—	159—163
—	—	—	—	—	—	—	3	314	598	164
1	—	1	—	—	2	7	4	5	10	165—203
35	16	14	16	20	67	148	318	262	35	204—205
894	159	94	76	92	202	409	745	1,127	972	Total.
5	12	1	—	—	—	—	—	—	—	7
19	8	2	—	—	—	—	—	—	—	9
—	3	3	—	—	—	—	—	—	—	10
5	3	6	3	1	3	10	15	18	7	11
1	2	3	14	19	10	8	5	4	—	31
—	—	2	3	—	—	—	1	—	—	32—37
—	—	—	—	—	6	5	11	14	12	43—49
—	—	—	1	—	1	—	5	4	2	57
1	4	7	1	—	—	—	—	—	—	71
—	1	1	2	—	4	25	51	70	38	74 (a) 1
—	—	2	3	1	3	10	17	28	12	74 (a) 2
—	—	1	—	—	—	1	2	7	4	75
1	1	5	9	10	13	5	11	3	1	78
287	54	4	—	1	1	—	—	—	—	79 and 80
—	—	—	—	—	5	11	27	21	9	89
—	—	—	4	6	11	28	34	33	19	90 (1)—90 (4)
—	—	—	—	—	4	7	14	7	3	90 (5)
—	—	1	5	6	31	74	124	177	94	{ 87, 88, 90(6)—90(9) }
—	—	—	—	—	—	2	11	15	14	91 (b)
32	15	3	3	3	5	14	36	84	91	99
24	9	2	—	—	—	—	2	3	1	100
5	12	6	1	1	3	1	4	—	1	101 (b)
—	1	—	—	1	3	2	7	10	2	105
2	1	3	—	—	3	3	3	4	2	112 (1)
—	—	3	2	2	2	4	4	3	1	111 (a) and 112 (2)
15	7	11	1	—	1	1	2	5	2	113 and 114
1	—	1	—	—	1	1	—	2	2	118
—	—	—	—	1	2	7	5	2	4	129
30	1	1	—	—	—	—	—	—	—	159
112	—	—	—	—	—	—	—	—	—	160
271	—	—	—	—	—	—	—	—	—	161 (1)
13	—	—	—	—	—	—	—	—	—	161 (2)
8	—	—	—	—	—	—	—	—	—	163
—	—	—	—	—	—	—	—	—	—	182
—	2	4	3	4	7	12	42	30	—	204
—	5	9	13	14	51	125	253	198	—	205 (1)
30	9	1	—	2	7	10	22	31	35	205 (2)
5	—	—	—	—	2	1	1	3	—	205 (3)

Table LXVIII. England and Wales, 1925 : Inquest Cases per thousand Deaths registered from the same Cause.

International List Number.	Cause of Death.	Total.	Males.	Females.	Non-Civilians.	Civilians.			
						London.	County Boroughs.	Urban Districts.	Rural Districts.
1—42	Infectious diseases	17	22	11	19	26	17	16	13
43—69	Other general diseases	10	14	8	30	15	12	9	8
70—86	Nervous diseases	37	42	32	26	55	44	31	27
87—96	Circulatory diseases	66	84	49	318	114	73	56	39
97—107	Respiratory diseases	26	29	23	—	44	32	19	14
108—127	Digestive diseases	38	42	33	68	50	39	36	31
128—142	Non-venereal diseases of the genito-urinary system—								
	Males	24	24	—	—	46	31	16	12
	Females	25	—	25	—	52	33	15	13
143—150	The puerperal state	70	—	70	—	202	73	41	52
151—154	Diseases of the skin, etc.	37	48	24	—	44	53	31	18
155—158	Diseases of the bones, etc.	101	125	62	—	99	135	85	74
159—163	Malformations : infantile diseases	33	31	35	—	53	36	26	27
164	Old age	15	19	12	—	2	27	10	12
165—203	Violence	977	984	961	974	988	985	974	963
204, 205	Ill-defined and unstated causes	254	286	210	1,000	541	330	199	226
	Total	69	89	48	357	91	70	64	61
7	Measles	5	4	6	—	12	6	2	3
9	Whooping cough	5	7	3	—	9	4	4	8
10	Diphtheria	9	10	8	—	6	12	7	8
11	Influenza	12	15	9	—	21	15	11	7
21	Erysipelas	55	69	40	—	50	75	41	32
29	Tetanus	723	758	615	—	905	821	714	571
31	Phthisis	10	13	7	—	20	11	8	6
32—37	Other tuberculous diseases	19	22	15	—	34	19	18	10
38	Syphilis	35	37	31	—	94	33	19	7
41	Septicæmia	465	555	332	—	356	520	491	407
43—49	Cancer	5	7	4	—	11	7	4	2
57	Diabetes	12	13	12	—	19	19	8	6
62	Thymus disease	686	725	627	—	677	654	706	714
66	Alcoholism	380	326	473	—	222	442	413	308
70	Encephalitis	105	102	109	—	140	145	78	38
74	Cerebral hæmorrhage, etc.	31	38	26	—	55	41	24	20
78	Epilepsy	121	138	103	—	146	96	137	123
79, 80	Convulsions	92	85	101	—	120	115	75	73
89	Angina pectoris	115	125	91	—	96	125	128	83
90 (1)—90 (4)	Valvular disease of heart	56	78	38	—	121	61	45	33
90 (5)	Fatty disease of heart	381	464	318	500	590	417	329	233
87, 88, } 90 (6)—90 (9) }	Other diseases of heart	42	56	31	1,000	40	51	42	32
91 (a)	Aneurysm	287	274	335	—	408	284	245	217
91 (b)	Arterio-sclerosis	54	66	40	200	129	62	39	18
99	Bronchitis	13	14	12	—	18	20	8	4
100	Broncho-pneumonia	25	24	25	—	50	23	19	15
101	Pneumonia	50	53	45	—	91	60	33	26
113 and 114	Diarrhoea	20	20	21	—	31	17	22	18
117	Appendicitis	27	27	27	71	46	27	24	21
118	Hernia, intestinal obstruction	43	48	37	—	59	40	43	38
122	Cirrhosis of liver	31	28	36	—	50	49	20	—
129	Chronic nephritis	30	33	27	—	59	42	18	14
153 (1)	Cellulitis	142	192	76	—	123	220	96	97
155 (1)	Acute osteomyelitis	146	182	75	—	121	203	122	110
159	Congenital malformations	31	30	33	—	62	34	21	29
161 (1)	Premature Birth	11	10	12	—	20	13	9	7
161 (2)	Injury at birth	88	74	111	—	134	86	86	70
162 (2)	Atelectasis	90	103	75	—	76	153	58	35
163	Lack of care	954	950	957	—	951	941	986	919
165—174	Suicide	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
175—203	Other violence	971	980	950	967	985	981	967	954
204—205 (2)	Ill-defined causes	224	257	180	1,000	409	293	180	205
205 (3)	Cause not stated	711	800	617	—	733	839	571	696

Table LXIX.—England and Wales, 1925. Uncertified Deaths per thousand Deaths Registered from the same Cause.

International List Number.	Cause of Death.	Total.	Males.	Females.	Non-Civilians.	Civilians.			
						London.	County Boroughs.	Urban Districts.	Rural Districts.
1—42	Infectious diseases	3	3	3	—	—	2	3	6
43—69	Other general diseases	2	2	2	—	0	2	2	2
70—86	Nervous diseases	15	18	13	—	1	14	17	22
87—96	Circulatory diseases	10	12	8	—	1	8	11	15
97—107	Respiratory diseases	5	5	6	—	0	6	6	6
108—127	Digestive diseases	4	4	4	—	1	4	5	5
128—142	Non-venereal diseases of the genito- urinary system—								
	Males	1	1	—	—	—	2	2	0
	Females	—	—	2	—	—	1	1	4
143—150	The puerperal state	4	—	4	—	—	3	3	10
151—154	Diseases of the skin, etc.	2	1	2	—	—	3	1	1
155—158	Diseases of the bones, etc.	1	2	—	—	—	4	—	—
159—163	Malformations: infantile diseases	19	19	20	—	2	20	21	25
164	Old Age	36	45	30	—	3	30	38	49
165—203	Violence	2	1	2	—	—	1	2	3
204, 205	Ill-defined and unstated causes	580	581	580	—	135	449	632	672
	Total	10	11	9	—	1	8	12	17
7	Measles	3	5	2	—	—	2	5	7
9	Whooping cough	5	5	5	—	—	2	7	13
10	Diphtheria	2	3	1	—	—	2	2	6
11	Influenza	6	6	6	—	—	5	5	10
31	Phthisis	2	2	3	—	—	2	2	4
32—37	Other tuberculous diseases	1	1	1	—	—	0	0	3
43—49	Cancer	1	1	1	—	0	1	1	1
57	Diabetes	3	5	2	—	—	2	4	4
71	Meningitis	7	6	9	—	—	3	15	5
74 (a) 1	Cerebral hæmorrhage	9	11	8	—	1	10	10	10
74 (a) 2	Apoplexy (lesion unstated)	33	46	21	—	—	27	33	43
75	Paralysis of unstated origin	7	10	4	—	7	4	5	14
78	Epilepsy	28	32	23	—	5	20	30	44
79 and 80	Convulsions	102	100	106	—	—	87	105	145
89	Angina pectoris	40	45	27	—	—	43	44	47
90 (1)—90 (4)	Valvular disease of heart	5	7	4	—	1	6	6	7
90 (5)	Fatty heart	13	14	12	—	—	12	18	16
87, 88 90 (6)—90 (9)	Other heart diseases	15	18	12	—	1	12	17	25
91 (b)	Arterio sclerosis	2	2	2	—	0	2	3	3
99	Bronchitis	8	9	8	—	0	9	9	9
100	Broncho-pneumonia	2	2	2	—	—	2	2	5
101 (b)	Pneumonia (not otherwise defined)	5	4	6	—	—	6	5	5
105	Asthma	13	11	17	—	4	19	15	5
112 (1)	Inflammation of stomach	12	7	17	—	—	17	8	14
111 (a) and 112 (2)	Other diseases of stomach	8	6	10	—	3	9	5	15
113 and 114	Diarrhœa and enteritis	5	6	4	—	1	4	9	8
118	Hernia and intestinal obstruction	2	1	3	—	—	1	3	2
129	Chronic nephritis	2	2	2	—	—	2	2	2
159	Congenital malformations	9	9	9	—	—	6	8	18
160	Congenital debility, sclerema, etc.	25	22	29	—	3	22	27	34
161 (1)	Premature birth	22	23	20	—	3	22	24	25
161 (2)	Injury at birth	12	6	23	—	—	16	9	17
163	Lack of care	34	41	26	—	—	59	—	81
182	Accidental drowning	1	2	—	—	—	2	—	3
204	Sudden death (1—70)	400	358	469	—	250	298	512	418
205 (1)	Heart failure (1—70)	770	766	776	—	300	697	792	815
205 (2)	Other ill-defined causes	387	401	372	—	—	229	386	566
205 (3)	Cause not specified	124	100	149	—	67	—	179	261

Table LXX.—England and Wales, 1925 : Inquests and Uncertified Cases per cent. of Total Deaths (from all causes) registered at the same ages.

	Inquests.			Uncertified Cases.
	Total.	Deaths from Disease.	Deaths from Violence.	Total.
All Ages	6·9	3·1	3·8	1·0
0—	4·7	3·4	1·3	1·7
1—	6·6	1·9	4·7	0·6
5—	13·4	3·5	9·9	0·7
15—	13·6	3·1	10·5	0·4
25—	11·6	3·3	8·3	0·4
35—	10·8	3·9	6·9	0·7
45—	10·2	4·5	5·7	0·9
55—	7·7	4·2	3·5	1·1
65—	5·2	3·1	2·1	1·2
75 and up	3·3	1·6	1·7	1·0

Table LXXI.—Inquest Cases and Uncertified Deaths in 1925. Proportions per 100 Deaths in each Registration County.*

Registration County.	Inquest Cases.		Uncertified Deaths.	
	Number.	Per 100 Deaths.	Number.	Per 100 Deaths.
England and Wales ..	32,669	6·91	4,770	1·01
England :—				
Bedfordshire	129	5·22	41	1·66
Berkshire	247	6·53	51	1·35
Buckinghamshire	118	5·32	35	1·58
Cambridgeshire	177	6·50	31	1·14
Cheshire	890	7·38	34	0·28
Cornwall	228	5·71	21	0·53
Cumberland	189	5·03	100	2·66
Derbyshire	421	6·21	164	2·42
Devonshire	555	6·22	81	0·91
Dorsetshire	138	5·52	27	1·08
Durham	1,012	5·06	649	3·25
Essex	1,004	6·70	204	1·36

* The numbers for the separate counties are made up from provisional figures supplied quarterly by local Registrars. Their total consequently differs slightly from the England and Wales figure.

Table LXXI.—Inquest Cases and Uncertified Deaths in 1925.
Proportions per 100 Deaths in each Registration County.—*continued.*

Registration County.	Inquest Cases.		Uncertified Deaths.	
	Number.	Per 100 Deaths.	Number.	Per 100 Deaths.
England— <i>continued</i> :—				
Gloucestershire	727	7·70	20	0·21
Hampshire	873	7·58	82	0·71
Herefordshire	84	5·83	43	2·98
Hertfordshire	206	5·90	37	1·06
Huntingdonshire	29	5·02	5	0·87
Kent	777	6·11	214	1·68
Lancashire	4,261	6·12	903	1·30
Leicestershire	347	5·53	59	0·94
Lincolnshire	368	5·30	97	1·40
London—North of Thames	3,168	9·48	9	0·03
„ South of Thames	1,885	8·61	1	0·00
Middlesex	1,020	7·98	10	0·08
Monmouthshire	428	8·07	13	0·25
Norfolk	395	6·53	93	1·54
Northamptonshire	213	4·87	84	1·92
Northumberland	686	6·64	200	1·94
Nottinghamshire	556	5·81	161	1·68
Oxfordshire	143	5·87	39	1·60
Rutlandshire	13	5·42	5	2·08
Shropshire	252	7·97	78	2·47
Somersetshire	422	6·85	20	0·32
Staffordshire	1,225	6·48	190	1·01
Suffolk	300	6·40	54	1·15
Surrey	962	8·65	21	0·19
Sussex	644	7·20	20	0·22
Warwickshire	978	5·84	366	2·19
Westmorland	46	5·80	14	1·77
Wiltshire	189	5·82	31	0·95
Worcestershire	232	5·69	38	0·93
Yorks East Riding	490	7·10	17	0·25
„ North „	416	7·03	34	0·57
„ West „	3,343	8·04	151	0·36
Wales :—				
Anglesey	17	3·23	15	2·85
Brecknockshire	49	7·05	10	1·44
Cærnarvonshire	98	4·32	51	2·25
Cardiganshire	48	3·90	21	1·70
Carmarthenshire	120	5·66	35	1·65
Denbighshire	84	4·37	44	2·29
Flintshire	80	8·02	15	1·50
Glamorganshire	1,273	8·23	10	0·06
Merionethshire	43	5·14	10	1·19
Montgomeryshire	48	5·77	19	2·28
Pembrokeshire	47	4·44	31	2·93
Radnorshire	8	3·33	3	1·25

POPULATION.

The total population of England and Wales as at the 30th June, 1926, has been estimated at 39,067,000 persons, 18,698,000 being males and 20,369,000 females.

The method adopted in arriving at these figures consists of taking the 1921 census population as a starting point, adding the births and immigrants and deducting the deaths and emigrants between the date of the census and the 30th June, 1926. The correctness of the current estimate depends, therefore, on the accuracy of the post-censal records of movement. Of these, only the portion relating to the natural increase, that is the excess of births over deaths, can be accepted unreservedly; the system of registration in this country is regarded as providing a very complete record of births and deaths, and errors in the registered numbers must be of an insignificant order in relation to population figures. But the same cannot be said of the migration element of the movement. Information regarding permanent migrants (*i.e.*, persons changing their permanent residence) between this country and places outside Europe, and also statistics of passenger traffic to and from the United Kingdom are collected by the Board of Trade. The movement of aliens is separately dealt with by the Home Office, and from the various War Departments changes in the disposition of non-civilians are available. On the other hand, there is no record of the movement between England and Wales and the other countries of the United Kingdom, and allowance has to be made for this in computing an estimate on the data gathered from the records which are available.

Such error as there may be in the population estimate is practically wholly attributable to migration, and it is one which will tend to grow in degree as the date of the preceding census becomes more remote. If the success which attended the estimation of the national populations of the last intercensal period as judged by the 1921 census is repeated, the error will be of a negligible order.

Age Distribution.—The analysis of the sex population totals into their respective age components which is shown in Table LXXII, has been derived from the corresponding 1925 distribution by the survivorship method used in recent years; this, briefly, consists of (1) obtaining the year's deaths arising from the population at each age in 1925, and treating the survivors as the population at the next higher age in 1926, (2) completing the table by the addition of the population aged 0-1, represented by the survivors at the middle of 1926 of the births occurring between the middle of 1925 and the middle of 1926, and (3) adjusting the results of these two operations in respect of migrants in accordance with such age statistics as are available in respect of them.

The average ages of the mid-1926 population according to the estimated age distribution are 30·7 and 32·2 for males and females respectively, as compared with averages of 29·9 and 31·2 at the last census, representing increases in the average age of 0·8

and 1·0 during the five years. Between 1911 and 1921 the average ages increased by 1·9 and 2·1 respectively.

Table LXXII.—England and Wales.—Estimated Age Distribution of the Population—Mid-1926.

Age Group.				Persons.	Males.	Females.
All ages	..	..	..	39,067,000	18,698,000	20,369,000
0—	..	..	..	665,130	337,130	328,000
1—	..	..	..	658,732	333,488	325,244
2—	..	..	..	666,523	336,874	329,649
3—	..	..	..	681,607	344,714	336,893
4—	..	..	..	731,610	370,390	361,220
0—	..	..	..	3,403,602	1,722,596	1,681,006
5—	..	..	..	3,195,419	1,615,694	1,579,725
10—	..	..	..	3,467,875	1,739,728	1,728,147
15—	..	..	..	3,599,094	1,804,321	1,794,773
20—	..	..	..	3,420,346	1,683,278	1,737,068
25—	..	..	..	3,060,449	1,404,746	1,655,703
30—	..	..	..	2,878,453	1,303,841	1,574,612
35—	..	..	..	2,720,790	1,243,805	1,476,985
40—	..	..	..	2,653,828	1,227,456	1,426,372
45—	..	..	..	2,496,703	1,168,498	1,328,205
50—	..	..	..	2,282,632	1,096,266	1,186,366
55—	..	..	..	1,870,894	893,926	976,968
60—	..	..	..	1,460,863	689,180	771,683
65—	..	..	..	1,079,200	493,144	586,056
70—	..	..	..	759,063	333,829	425,234
75—	..	..	..	427,605	172,396	255,209
80—	..	..	..	207,629	77,805	129,824
85 & upwards	..	..	..	82,555	27,491	55,064

Local Populations.—As for the country as a whole, so for each individual borough, urban district and rural district, the mid-year estimate of population is obtained by ascertaining or estimating the post-censal natural movement and migration and modifying the 1921 figure in respect of such movements. It was pointed out in the 1921 Statistical Review that the populations as enumerated at the census were not always appropriate for use with vital statistics owing to the presence in seaside and holiday resorts of large numbers of temporary visitors; special steps were taken to measure the amount of temporary inflation in each area and to disperse it so as to correspond more nearly to a residence distribution. For a fuller account of the processes involved, reference may be made to the Statistical Review for 1921, in which will also be found the basic populations of each area on which the succeeding years' estimates have been founded.

In framing a basis for the estimation of the local changes in population two primary conditions have to be satisfied.

- (a) The net aggregate of the local increases and decreases must correspond to the more reliably calculated change in the total national population.
- (b) The method must be capable of impartial application to all areas alike.

So far as the natural movement by births and deaths is concerned, details are known precisely in respect of each area, and the use of the local registration returns automatically ensures compliance with both conditions. With regard to the balance of the movement summed up in the term migration, there is, however, a complete absence of direct record. With an exception perhaps in the case of certain aliens, changes of residence are not subject to official notification here, as they are in some foreign countries, and all knowledge of the movement is limited to such inference as can be drawn from other records, like housing, rating returns, registers of electors, etc., in which the effect of migration may be expected to be reflected. Of these the electoral register is the only one regularly available in respect of every urban and rural area of the country and, therefore, satisfying condition (b), and the increases or decreases in the numbers of local government electors have been adopted as the criteria in assessing the incidence of local migration.

But it has to be borne in mind that changes in the register are not all attributable to migration; the mere attainment of franchise age by the existing population, so far as this is not counterbalanced by the deaths of persons already on the register, affects the electorate and falls with varying weight in areas of different age constitution. The incidence of this natural growth factor can be and has been estimated approximately by means of the census age classifications of local populations, and some allowance for it has been incorporated in the estimation formula. Again, persons admitted to the franchise are restricted to certain classes above the ages of 21 and 30 in the case of males and females respectively, numbering only about 40 per cent. of the total population, and the assumption has to be made that movements within the franchise qualifications correspond to similar movements in the whole population. Finally, electoral registration can only take place after six* months' residence in an area, and such migration change as is reflected is that of a period at least six months prior to the period to which the records relate. Notwithstanding these defects it is reasonable on the whole to suppose that any marked migration in either direction will sooner or later make its impression on the electoral record, though on account of the indirectness of the evidence, the factor is not accorded the same weight in the estimation formula as that given to the direct records of births and deaths.

The 1926 mid-year populations actually adopted were obtained by assuming that the net rate of population increase in each area was

$$A + x(B - C) - y$$

where A, B and C are local characteristics ascertained from the records of each area: viz. :—

A = rate of natural increase, 1921–1926 (mid-year points).

B = rate of electoral increase, 1921–1926 (Autumn registers).

C = expected rate of normal growth in electorate (Autumn registers.)

* See note on page 163.

and x and y are constants applicable to all areas alike. Regarding the latter, it may be assumed that, since the coefficient of A in the estimation formula is unity, x should, for the reasons suggested, be lower and therefore fractional in character and that since the disturbance due to the time lag in the electoral record diminishes as the period between census and date of estimate lengthens, it may reasonably be allowed an increasing value as the date of the census recedes. In practice a number of values of x are experimented with and that value adopted which, when inserted in the formula, yields results most in harmony with the movements of past intercensal periods and with current movements of which we have reliable records, e.g. results of local censuses, etc. For 1926 the value adopted for x was $\frac{4}{8}$ ths as compared with $\frac{1}{2}$ in 1925, the change, while introducing some irregularity in the series of annual estimates in the case of a few areas, tending, it is believed, to benefit on the whole the estimates for the 1,800 odd areas for which separate figures have to be provided. The constant y represents the adjustment required to ensure compliance with condition (a) viz., that the local totals must aggregate to the figure representing the national population as a whole.

An exception to the basis thus described was made in the case of the Administrative County of London and its constituent Boroughs, in respect of which population estimates had been made earlier in the year for the purposes of the Equalization of Rates Act, 1894. For the whole County the estimate was not very different from that which would have resulted from the use of the above formula, but, in the distribution of the County population among the Metropolitan Boroughs, use was also made of certain housing returns provided by the Local Authorities under the said Act, and these estimates have been retained unaltered in the present Review.

Non-Civilian Population.—It will be observed in the tables in which the estimated local populations are given (Table 14 of Part I and Table E of Part II) that the local deaths and death-rates refer to civilians only and in conjunction with these a civilian population should preferably be used instead of a total population containing a number of non-civilians. In the majority of areas, however, the two populations may be regarded as sufficiently identical, and no special measures have been regarded as necessary in respect of them, but in a few areas in which the non-civilians were proportionally numerous, estimates of civilian populations have been provided in addition to total populations and are shown in footnotes appended to the tables.

Institutions.—The populations of Hospitals, Infirmarys, Asylums, etc., remain credited to the areas of enumeration, notwithstanding that some persons so included may, on a strict residence classification, more properly be assigned elsewhere.

Table LXXIII.—Estimated Civilian Population by Sex and Age in the middle of the Year 1926.

(Figures given to the nearest hundred.)

	All Ages.	0—	5—	15—	25—	35—	45—	55—	65—	75 and upwards.
All areas :—										
England and Wales	18,519,0	1,722,6	3,355,4	3,391,3	2,657,5	2,445,0	2,259,4	1,583,1	827,0	277,7
North	20,369,0	1,681,0	3,307,9	3,531,8	3,230,3	2,903,4	2,514,6	1,748,7	1,011,3	440,1
Midlands..	6,306,5	594,0	1,141,9	1,191,4	932,3	850,9	768,7	510,7	248,3	68,3
South	6,782,7	582,9	1,131,3	1,209,7	1,095,9	980,0	828,1	552,0	296,2	106,6
Wales	5,934,0	546,8	1,084,3	1,096,0	833,0	773,2	712,6	509,9	277,4	100,7
	6,443,6	532,6	1,066,6	1,112,9	998,9	904,8	785,6	554,2	333,3	154,7
	4,924,1	449,0	872,6	850,2	691,2	644,9	618,4	457,0	248,8	92,0
	5,783,5	436,4	856,3	9,641	922,0	836,2	747,8	540,8	325,4	154,5
	1,370,2	132,6	256,7	262,1	205,5	178,3	160,2	105,5	52,5	16,7
	1,359,2	129,2	253,7	245,1	213,5	182,3	153,1	101,6	56,4	24,3
London	2,127,6	205,1	373,8	381,5	319,7	284,3	264,4	181,4	89,7	27,6
	2,477,8	199,6	373,1	444,8	419,2	357,2	307,6	207,9	117,2	51,2

County Boroughs	{ M F }	6,141,9	589,8	1,121,7	1,134,0	913,6	838,9	753,8	488,1	235,2	66,8
		6,808,1	579,1	1,119,1	1,231,4	1,110,0	984,5	823,7	544,6	297,9	117,8
		3,300,7	317,1	599,4	619,2	495,2	454,4	408,3	258,3	118,8	30,0
		3,611,9	311,5	597,9	657,0	593,9	528,0	438,2	283,9	149,0	52,5
		1,937,0	187,4	359,4	359,5	286,0	262,5	233,2	151,3	75,3	22,3
Midlands..	{ M F }	2,147,4	184,3	359,5	395,4	349,3	305,3	253,7	167,3	93,7	38,9
		620,7	57,9	111,6	100,8	86,0	83,7	79,4	57,6	31,6	12,0
		766,2	56,6	110,4	124,4	119,5	112,8	101,0	73,8	45,2	22,5
South ..	{ M F }	283,5	27,4	51,3	54,6	46,4	38,2	32,8	20,9	9,5	2,5
		282,6	26,7	51,3	54,6	47,3	38,4	30,8	19,6	10,0	3,9
Other Urban Districts	{ M F }	6,341,4	578,2	1,161,0	1,157,5	909,9	845,5	778,3	539,5	278,9	92,6
		7,039,7	563,2	1,144,3	1,220,7	1,110,4	1,011,4	877,6	608,2	351,2	152,7
		2,119,7	194,3	381,2	398,4	314,4	288,3	260,0	174,1	85,6	23,3
		2,280,7	190,3	378,5	401,6	367,9	330,9	282,5	190,2	102,5	36,3
		2,349,1	212,7	433,2	432,2	333,0	310,6	285,6	199,8	105,2	36,7
Midlands..	{ M F }	2,612,9	206,8	425,6	458,4	408,2	373,5	323,2	223,6	132,5	61,1
		1,204,4	104,4	216,9	199,0	162,2	158,2	154,5	117,2	65,8	26,1
		1,483,6	101,1	211,4	239,0	229,2	217,9	198,7	148,6	92,1	45,6
South ..	{ M F }	668,4	66,8	129,6	127,9	100,4	88,3	78,2	48,4	22,3	6,5
		662,5	65,0	128,8	121,7	105,1	89,1	73,2	45,8	24,1	9,7
Rural Districts	{ M F }	3,923,9	349,3	699,0	726,6	518,7	478,7	463,5	374,1	223,2	90,7
		4,043,4	339,2	671,4	634,9	590,7	550,2	505,7	387,9	245,0	118,4
		886,2	82,6	161,3	173,8	122,8	108,2	100,4	78,3	43,9	15,0
		890,1	81,1	154,9	151,1	134,1	121,1	107,4	77,9	44,7	17,8
		1,647,9	146,7	291,7	304,2	214,0	200,1	193,8	158,8	96,9	41,7
Midlands	{ M F }	1,683,3	141,5	281,5	259,1	241,4	226,0	208,7	163,3	107,1	54,7
		971,5	81,6	170,2	168,9	123,2	118,6	120,1	100,8	61,7	26,3
		1,055,9	79,1	161,4	155,9	154,1	148,3	140,5	110,5	70,9	35,2
South ..	{ M F }	418,3	38,4	75,8	79,7	58,7	51,8	49,3	36,2	20,7	7,7
		414,1	37,5	73,6	68,8	61,1	54,8	49,1	36,2	22,3	10,7

Local Age Distributions, 1926.—Sex and age distributions have been prepared for the large aggregates shown in Table LXXIII. The populations at ages under five were obtained by the survivorship method (*see* page 126), and for later ages the total populations estimated by the formula given in the preceding section were distributed in accordance with the census age and sex distribution of the unit, the resulting figures being thereafter modified to allow for the change between 1921 and 1926 of the age distribution of the total population of the country.

United Kingdom and Irish Free State.—The populations of each of the countries of the United Kingdom and of the Irish Free State as estimated by their respective Registrars-General, are shown for each year from 1887 in Table A on page 2 (Part II).

MARRIAGES.

The marriages registered in England and Wales during the year 1926 numbered 279,860, corresponding to a rate of 14·3 persons married per 1,000 of the population of all ages and conditions. The number so registered is 15,829, or 5·35 per cent. less than the number registered in 1925, and represents a decrease of 0·9 in the proportion married per 1,000 population.

This drop of over 5 per cent. in the number of marriages is a comparatively large variation for a single year; it is in fact larger than any corresponding change shown in Table C of Part II of this Review (*i.e.*, since 1887) outside the period of violent fluctuations associated with the war, *viz.*, 1914–1922. It is the more noteworthy in that in the three immediately preceding years the marriage rate (per 1,000 total population) has remained practically stationary from which it had been inferred that, the war disturbance having come to an end, marriage rates were once again settling down to the more stable conditions of peace years and at a level not dissimilar from that of the pre-war era. The present fall, reducing the rate to a position almost as low as any hitherto recorded, is therefore somewhat remarkable. From such analysis as is afforded by the tabulated statistics it can almost certainly be ascribed as arising mainly from the unfortunate industrial disturbances of the year from which it appears to be a direct and immediate consequence.

The marriages of the first quarter of the year—always fewer than those of other quarters—were not significantly different from the corresponding numbers registered in the first quarter of 1925; but in the second, third and fourth quarters the numbers were down by 3,528, 6,484, and 5,782 respectively. So that the change can be definitely located as having commenced somewhere about the middle of the second quarter of the year coinciding, therefore, very closely with the coal stoppage and the general strike which commenced at the beginning of May. The paralysis of industry, particularly that associated with coal itself, was prolonged and severe, but it may, it is hoped, be regarded in the long run as a transitory event in which case there would appear no reason why the marriage rates should not speedily recover much of the position now lost.

Though, as stated, the fall was greatest in the third quarter of the year, the preference for that quarter, noticeable in the records since the beginning of the present century, was maintained in 1926, the marriages in this period being about 30 per cent. of the total. The rate for the first quarter, representing a little more than 16 per cent. of the year's marriages, similarly retained its customary place in being lower than that of either of the later quarters.

In the following table the marriages both of the current year and of a series of past periods are compared with the marriageable population which comprises bachelors and widowers in the case of men and spinsters and widows in the case of women at all ages over 15. The sudden rise in the rates between 1911 and 1920, which broke the steady fall registered over a long series of earlier years, is seen to have been followed by an equally sharp decline, the marriages of 1926 comprising 50·0 per 1,000 of the marriageable male population and only 38·3 per 1,000 of the marriageable females as compared with rates of 71·5 and 54·7 per 1,000 respectively in 1920. The apparent difference between the male and female ratios is of course due to the inequality of the numbers of unmarried men and women in the population and since the former have always been in a minority—which has been unduly exaggerated as a result of the war—it is their numbers which primarily determine the marriageability of the population and the male ratios may accordingly be expected to provide the better indexes to the variations which have occurred from time to time in the incidence of marriage.

Table LXXIV.—England and Wales. Annual Number of Marriages of Men and Women per 1,000 Marriageable Population of each Sex aged 15 and over, 1871–1926.

NOTE.—The annual numbers of marriages have been taken as the average of the three years about each Census prior to 1921. During the 1921 period the marriage-rates were changing rapidly and it has been deemed preferable to show the rates for this period by individual years.

Year.			Bachelors, Widowers, Spinsters and Widows.	Bachelors and Widowers.	Spinsters and Widows.
1871	..	..	57·2	62·3	52·9
1881	..	..	51·5	56·0	47·6
1891	..	..	49·8	54·6	45·7
1901	..	..	48·7	53·5	44·7
1911	..	..	46·3	50·8	42·5
1920	..	..	61·7	71·5	54·7
1921	..	..	52·1	60·4	45·8
1922	..	..	48·2	55·8	42·5
1923	..	..	46·6	53·9	41·1
1924	..	..	46·6	53·6	41·2
1925	..	..	46·2	53·2	40·9
1926	..	..	43·4	50·0	38·3

Fluctuations of the general Marriage-rate in different Sections of the Country.—In tables LXXV and LXXVI comparison is made of the years marriages and marriage-rates in large geographical sections of the country, and an analysis of recent rates in Registration Counties is shown in Table LXXVII.

The determination of marriage-rates for localities is not wholly satisfactory for several reasons. In a large proportion of cases the district of registration is the district of residence of only one of the parties and in some cases of neither. This difficulty, however, is probably of less moment in comparisons between large sections of the country than between smaller adjacent localities. Again, it has only been possible till now to tabulate marriages by registration areas, while the available estimates of population for years other than census years refer to administrative areas. The populations upon which the rates for such years are based have, therefore, to be derived from the estimated populations of the corresponding aggregates of administrative counties and county boroughs on the assumption of a ratio between the population of the registration and administrative areas. Any error so introduced is, however, probably small and not likely to have any appreciable effect upon the rates quoted.

Table LXXV.—Marriages of each year in Geographical Sections of the Country : 1914–1926.

	North.	Midlands.	South.	Wales.	England and Wales.
1914 ..	100,926	87,695	85,728	20,052	294,401
1915 ..	115,694	109,844	113,868	21,479	360,885
1916 ..	90,287	84,895	87,322	17,342	279,846
1917 ..	83,151	78,761	80,356	16,587	258,855
1918 ..	92,381	87,798	89,928	17,056	287,163
1919 ..	125,863	111,180	107,971	24,397	369,411
1920 ..	136,443	114,942	102,930	25,667	379,982
1921 ..	110,864	97,218	91,831	20,939	320,852
1922 ..	101,335	91,657	86,610	19,922	299,524
1923 ..	99,640	89,483	83,152	20,133	292,408
1924 ..	100,400	92,035	84,252	19,729	296,416
1925 ..	99,301	92,172	84,882	19,334	295,689
1926 ..	89,777	89,146	84,617	16,320	279,860

Table LXXVI.—Marriage-rate per 1,000 Marriageable Population aged 15 and over in Geographical Sections of the Country.

	Rate per 1,000 Marriageable Population aged 15 and over.			Ratio of local rate to England and Wales rate (taken as 1,000.)		
	1921	1925	1926	1921	1925	1926
Males						
England and Wales	60·4	53·3	50·0	1,000	1,000	1,000
North	61·6	52·7	47·4	1,020	989	948
Midlands ..	60·1	54·1	51·8	995	1,017	1,036
South (including London)	62·2	55·9	55·1	1,030	1,050	1,102
Wales	49·5	43·3	36·6	820	814	732
London ..	71·7	62·3	62·2	1,187	1,170	1,244
Females						
England and Wales	45·8	40·9	38·3	1,000	1,000	1,000
North	48·7	42·1	37·8	1,063	1,029	986
Midlands ..	46·1	42·0	40·2	1,007	1,028	1,048
South (including London)	41·8	37·9	37·4	913	927	974
Wales	49·5	43·8	37·0	1,081	1,073	964
London ..	46·5	40·8	40·7	1,015	998	1,061

It will now be observed that the decline is confined mainly to those sections of the country associated with coal producing and using industries. It is proportionately greatest in Wales where the marriages are fewer by more than 15 per cent. than they were last year while, in the much more populous Northern section, the drop of approximately 10,000 in numbers constitutes a fall of nearly 10 per cent. On the other hand the Midlands show a decline of only 3·3 per cent. while in the South there has been very little change. In the case of males the changes accentuate a tendency which has been observed in recent years, for between 1921 and 1923 the North ranked above the Midlands whereas since 1924 the position has been reversed with an increasing difference in favour of the latter. In Wales the male rate has been consistently lower than that of other sections throughout and the latest change is one of degree only; the female rate on the other hand was, till 1925, in excess of that for the remainder of the country and the present year's returns are the more exceptional therefore in that Wales now stands lowest on the list. The range of variation amongst females is, however, very much less than among males in the several sections.

Table LXXVII.—Marriage-rate per 1,000 marriageable Population
—all marriages and marriages of minors separately—in
Registration Counties, 1921 and 1926.

Area.	All Marriages.				Minors.			
	Persons married per 1,000 marriageable population of the age of 15 and over.		Ratio to England and Wales rate.		Persons married per 1,000 marriageable population 15-21.		Ratio to England and Wales rate.	
	1921	1926	1921	1926	1921	1926	1921	1926
England and Wales ..	52·1	43·4	1,000	1,000	15·6	12·6	1,000	1,000
North	54·4	42·1	1,044	970	17·7	13·0	1,135	1,032
Cheshire	48·3	40·9	927	942	13·2	10·8	846	857
Lancashire	54·1	41·7	1,038	961	15·0	11·4	962	905
Yorkshire, West Riding	56·3	44·3	1,081	1,021	19·1	14·0	1,224	1,111
„ East Riding	56·1	47·4	1,077	1,092	19·7	16·1	1,263	1,278
„ North Riding	47·3	39·6	908	912	18·5	15·5	1,186	1,230
Durham	60·7	41·8	1,165	963	25·1	15·9	1,609	1,262
Northumberland ..	52·7	38·7	1,012	892	19·3	13·5	1,237	1,071
Cumberland	46·9	35·1	900	809	17·3	13·0	1,109	1,032
Westmorland	43·4	32·8	833	756	10·7	8·0	686	635
Midlands	52·2	45·3	1,002	1,044	14·8	12·4	949	984
Middlesex	50·2	45·6	964	1,051	11·8	10·9	756	865
Hertfordshire	44·7	40·1	858	924	12·2	10·3	782	817
Buckinghamshire ..	45·2	42·0	868	968	10·5	11·7	673	929
Oxfordshire	44·8	40·7	860	938	10·8	13·0	692	1,032
Northamptonshire ..	53·7	44·1	1,031	1,016	14·2	11·2	910	889
Huntingdonshire ..	54·9	47·3	1,054	1,090	18·0	19·0	1,154	1,508
Bedfordshire	50·7	42·4	973	977	14·2	11·8	910	937
Cambridgeshire ..	49·6	44·1	952	1,016	15·6	16·3	1,000	1,294
Essex	53·5	46·4	1,027	1,069	12·3	11·0	788	873
Suffolk	48·7	42·1	935	970	14·7	11·4	942	905
Norfolk	49·6	45·5	952	1,048	14·3	13·9	917	1,103
Gloucestershire ..	49·8	42·3	956	975	11·0	8·7	705	690
Herefordshire	42·7	36·1	820	832	8·5	8·1	545	643
Shropshire	45·7	39·4	877	908	10·7	9·5	686	754
Staffordshire	57·0	46·8	1,094	1,078	17·9	13·2	1,147	1,048
Worcestershire	49·2	44·2	944	1,018	13·6	12·1	872	960
Warwickshire	50·7	50·3	973	1,159	14·0	12·6	897	1,000
Leicestershire	58·9	46·7	1,131	1,076	17·5	13·2	1,122	1,048
Rutlandshire	39·4	33·3	756	767	6·2	8·6	397	683
Lincolnshire	54·3	44·3	1,042	1,021	19·4	15·4	1,244	1,222
Nottinghamshire ..	58·0	46·0	1,113	1,060	22·4	17·0	1,436	1,349
Derbyshire	56·9	44·8	1,092	1,032	18·2	14·1	1,167	1,119
South (including London)	50·0	44·5	960	1,025	13·6	12·4	872	984
London	56·4	49·2	1,083	1,134	15·5	12·9	994	1,024
Surrey	43·9	39·1	843	901	10·4	10·2	667	810
Kent	45·9	42·8	881	986	13·5	12·9	865	1,024
Sussex	39·4	37·6	756	866	11·5	12·4	737	984
Hampshire	48·5	43·7	931	1,007	13·7	14·0	878	1,111
Berkshire	46·1	40·3	885	929	11·8	10·9	756	865
Wiltshire	50·8	41·5	975	956	12·2	9·5	782	754
Dorsetshire	46·0	41·9	883	965	11·8	12·4	756	984
Devonshire	46·7	42·7	896	984	13·1	12·8	840	1,016
Cornwall	41·5	40·0	797	922	11·9	13·9	763	1,103
Somersetshire	46·0	40·3	883	929	11·0	9·9	705	786
Wales	49·5	36·8	950	848	16·4	11·9	1,051	944
Monmouthshire	53·8	37·6	1,033	866	18·5	12·3	1,186	976
Glamorganshire	56·6	38·8	1,086	894	19·8	13·2	1,269	1,048
Carmarthenshire ..	46·5	34·0	893	783	15·8	13·5	1,013	1,071
Pembrokeshire	43·3	38·0	831	876	12·2	10·4	782	825
Cardiganshire	29·6	25·4	568	585	5·7	6·8	365	540
Brecknockshire	46·0	35·8	883	825	11·8	11·6	756	921
Radnorshire	36·0	33·9	691	781	8·7	12·0	558	952
Montgomeryshire ..	38·9	32·0	747	737	8·7	10·8	558	857
Flintshire	40·8	37·9	783	873	8·5	9·5	545	754
Denbighshire	43·1	36·0	827	829	11·2	8·2	718	651
Merionethshire	34·4	32·5	660	749	6·9	5·8	442	460
Caernarvonshire ..	36·9	36·4	708	839	8·2	9·1	526	722
Anglesey	33·4	30·5	641	703	7·4	5·1	474	405

From the county analysis in Table LXXVII it will be seen that the 1926 marriage-rate was highest in Warwickshire where it exceeded the mean for the country by 15·9 per cent. followed by London with a 13·4 per cent. excess, Yorks East Riding (9·2 per cent.), Huntingdon (9·0 per cent.), Staffs (7·8 per cent.) and Leicester (7·6 per cent.). Rural counties with few exceptions, retain their customary place at the other end of the list while coal mining counties formerly recording the highest rates, are now well below the average on the whole. The decline, as compared with last year's figures, is greatest in Monmouth and Glamorgan where it amounts to 20 per cent. while in Durham and Northumberland it is approximately 15 and 13 per cent. respectively.

Marriage-rates by ages which should provide an even more exact statement of the incidence and intensity of marriage are shown in Table LXXVIII. In connexion with this table, however, it is necessary to state that the ascertainment of age rates, in years other than those in which the distribution of the population by sex, marital condition and age is definitely known by means of a census enumeration, involves a degree of estimation of population detail in which the margin of error may be not insignificant, owing to the absence of a complete record of the movements between the single, married and widowed sections of the population. Nevertheless, no study of the marriage tendencies in a population can proceed without reference to these factors, and the possibility of the crude rates being made the basis of erroneous inferences justifies the inclusion of the following series of age rates, though those relating to the current inter-censal period must be regarded as provisional approximations to be confirmed or amended in accordance with changes shown by the next census analysis.

Table LXXVIII.—England and Wales. Annual Marriage-rate per 1,000 Bachelors, Widowers, Spinsters, and Widows respectively at each of several Age Periods, 1871–1926.

NOTE.—The annual numbers of marriages have been taken as the average of the three years about each Census prior to 1921. During the 1921 period, the marriage-rates were changing rapidly and it has been deemed preferable to show the rates for this period by individual years.

Year.	Annual marriage-rate per 1,000 in each age group.						Marriage rate per 1,000 population over 15 in each class.	Ratio to corresponding rate for 1921.	Marriage rate which would have resulted had the 1921 age rates been in operation.	Ratio of actual marriage rate (Col. 8) to rate in previous column (10).
	15—	20—	25—	35—	45—	55 and over.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
BACHELORS.										
1871	6.0	122.4	119.3	43.3	15.3	3.2	61.7	987	62.3	990
1881	4.6	106.8	112.4	40.5	14.3	3.0	55.7	891	62.4	893
1891	3.1	94.7	122.4	43.4	15.2	3.5	54.8	877	63.8	859
1901	2.5	85.9	123.7	44.2	14.6	3.3	54.7	875	66.6	821
1911	2.2	74.8	120.6	44.4	14.9	3.9	52.6	842	69.2	760
1920	4.0	110.2	191.4	73.6	22.9	5.8	73.8	1,181	—	—
1921	3.4	94.4	161.1	61.6	19.7	5.5	62.5	1,000	62.5	1,000
1922	2.9	85.5	156.5	58.7	18.7	5.3	58.1	930	61.7	942
1923	2.6	82.7	155.8	57.1	17.2	4.7	56.3	901	61.1	921
1924	2.5	80.5	160.2	57.1	17.2	4.9	56.0	896	60.7	923
1925	2.4	78.5	163.2	57.6	17.0	5.4	55.7	891	60.6	919
1926	2.6	71.8	158.6	54.5	16.6	4.9	52.6	842	60.4	871
WIDOWERS.										
1871	11.5	229.0	288.5	181.5	88.3	15.9	65.8	1,475	56.0	1,175
1881	30.6	192.9	246.5	157.8	76.9	16.0	58.2	1,305	56.0	1,039
1891	14.1	153.4	231.7	151.1	74.7	15.5	53.4	1,197	53.7	994
1901	—	132.6	201.7	134.1	65.3	13.5	44.4	996	51.0	871
1911	—	121.6	171.2	117.9	59.4	12.7	36.9	827	47.4	778
1920	—	231.8	314.1	195.4	88.7	17.8	55.0	1,233	—	—
1921	14.3	163.7	229.3	155.2	73.5	15.8	44.6	1,000	44.6	1,000
1922	—	136.0	204.7	140.5	65.7	14.3	39.3	881	43.7	899
1923	27.8	139.5	199.9	135.1	63.3	14.1	37.3	834	42.7	874
1924	—	119.6	195.6	132.3	64.4	14.1	36.8	821	42.1	869
1925	—	125.4	181.8	129.3	63.6	14.8	35.8	803	41.5	863
1926	—	88.5	164.7	121.7	59.5	13.5	32.5	729	40.7	799
SPINSTERS.										
1871	26.8	133.7	85.9	30.4	11.9	1.7	63.1	1,164	55.8	1,131
1881	21.5	121.9	80.6	26.3	10.4	1.6	56.9	1,050	55.8	1,020
1891	16.2	112.4	85.7	26.4	10.3	1.7	54.4	1,004	57.1	953
1901	12.9	104.9	88.6	25.3	9.1	1.5	53.0	978	58.6	904
1911	11.2	97.7	91.1	24.4	8.5	1.8	50.6	934	58.0	872
1920	16.0	134.1	117.3	30.3	10.2	2.1	63.1	1,164	—	—
1921	14.8	114.4	100.0	25.6	8.9	2.0	54.2	1,000	54.2	1,000
1922	13.2	108.2	96.6	24.0	8.1	1.8	50.9	939	53.8	946
1923	12.5	108.2	93.6	23.1	7.8	2.0	49.8	919	53.5	931
1924	12.4	109.8	94.9	22.8	8.0	1.8	50.1	924	53.3	940
1925	12.7	110.4	94.1	22.9	7.9	2.1	50.0	923	53.1	942
1926	12.9	104.0	88.7	21.3	7.6	2.0	47.3	873	52.9	894
WIDOWS.										
1871	55.4	170.5	125.5	55.7	20.8	2.6	21.1	1,172	19.6	1,077
1881	56.6	155.3	114.5	50.2	18.6	2.6	18.2	1,011	18.5	984
1891	49.3	150.4	114.3	50.3	17.8	2.4	16.3	906	16.8	970
1901	54.9	140.7	115.9	48.9	15.6	2.1	14.4	800	15.6	923
1911	30.0	151.2	114.1	48.9	15.6	2.1	12.5	694	13.6	919
1920	62.9	322.6	159.7	59.1	20.7	2.9	24.3	1,350	—	—
1921	36.1	191.4	120.3	50.6	17.6	2.5	18.0	1,000	18.0	1,000
1922	38.8	145.1	98.9	43.3	15.7	2.3	14.5	806	17.0	853
1923	13.0	143.4	86.2	37.7	14.9	2.2	12.5	694	16.3	767
1924	14.3	143.1	79.7	36.9	15.0	2.3	11.9	661	15.9	748
1925	46.2	123.9	69.8	33.6	14.8	2.4	10.9	606	15.5	703
1926	16.4	109.0	62.5	31.0	13.3	2.3	9.8	544	15.1	649

It will be observed from the last column of Table LXXVIII which compares the actual marriages of each year with a standard number, viz., those expected according to the age rates of 1921 and which makes allowance, therefore, for the changing age constitution of the unmarried population, that for each of the four sections distinguished, bachelors, widowers, spinsters and widows, the frequency of marriage has declined during the year, the fall being most marked in the case of widowers and widows. In respect of these two classes the decline has been uninterrupted since 1921 and the present frequencies are only 79·9 per cent. and 64·9 per cent. of what they were in that year. For bachelors and spinsters the movement has been less even; the present frequencies correspond to 87·1 per cent. and 89·4 per cent. of the 1921 position respectively, the bulk of the fall in their cases having taken place between 1921 and 1922, and during the immediately preceding 12 months. On this basis of comparison the marriage frequencies of bachelors, widowers and spinsters are markedly higher than they were for a number of years before the war—particularly as regards bachelors—while the reverse is the case amongst widows whose frequencies are incomparably lower than any hitherto recorded for this class in the table.

From the earlier columns of Table LXXVIII in which the incidence of marriage is shown according to age, it will be seen that the only exceptions to the general fall during the past year are located at ages under 20, where small increases are recorded for both bachelors and spinsters. The maintenance of the marriage-rate of young spinsters at a point well in excess of the corresponding rates of pre-war years, in spite of their diminished opportunities for marriage, has been a feature of the returns of recent years, and some differentiation in favour of the younger ages would therefore be but in accordance with post-war experience. But hitherto these higher rates have been maintained up to and including the age group 25–35 whereas for this year both in the period 20–25 and the period 25–35 appreciable decreases are shown, though the rate at ages 20–25 is still above that of 1911.

With bachelors the feature of the present year's analysis is the comparative smallness of the decrease in the rate at ages between 25 and 35 at which practically one half of the marriages of this class take place; at this, as at all older age periods, the present frequencies are well above those of pre-war years whereas between 20 and 25, on the other hand, the rate which has fallen continuously since 1920, shows a further decline, reducing it below the earlier standards.

In respect of widowers and widows a decline occurs at all ages and is, in general, greater than that recorded for bachelors and spinsters throughout. But, notwithstanding this, re-marriages continue to be much more frequent than first marriages in equivalent sections of either the male or female population. At every

age period where the data are sufficient to provide reliable comparisons, the 1926 rates for widowers and widows are, with one exception, higher than those for the single, but much more so in the case of males. The exception which has only been observed in recent years is to be seen in the female age group 25-35, where the widow rate is 62·5 per 1,000, as compared with the spinster rate of 88·7. In regard to the incidence of marriage amongst the single and widowed sections of the community, attention may perhaps be called to the misleading nature of the comparison suggested by the aggregate marriages per 1,000 population shown in column 8 of Table LXXVIII; owing to the concentration of the single population at the younger ages where marriages are numerous, and the widowed population at the later ages where they are few, the aggregate rate for the single of each sex appears to be vastly in excess of that of the widowed, whereas if allowance be made for the difference in their age constitutions, the position is reversed, and is now as strongly in favour of the widowed.

Table LXXIX.—England and Wales: Proportions of First Marriages and Re-marriages in 1,000 Marriages, 1918-1926.

Year.	Men.		Women.		Bachelors who married.		Widowers who married.	
	Bachelors.	Widowers.	Spinsters.	Widows.	Spinsters.	Widows.	Spinsters.	Widows.
1918 ..	901	99	894	106	837	64	57	42
1919 ..	897	103	875	125	816	81	59	44
1920 ..	907	93	894	106	839	68	55	38
1921 ..	911	89	909	91	855	56	54	35
1922 ..	913	87	920	80	866	47	54	33
1923 ..	915	85	929	71	875	40	54	31
1924 ..	916	84	932	68	880	36	53	31
1925 ..	916	84	937	63	884	32	53	31
1926 ..	917	83	940	60	887	30	53	30

Tables LXXX and LXXXI continue the series shown in previous issues of the Review classifying the marriages of the year by age, the former giving the mean ages of the persons married in each of the possible combinations and the latter extending the analysis into a number of age groups.

Table LXXX.—England and Wales : Mean Ages at Marriage,
1896–1926.

Males.

Year.	All Bridegrooms.	All Bachelor Bridegrooms.	All Widower Bridegrooms.	Bachelors with Spinsters.	Bachelors with Widows.	Widowers with Spinsters.	Widowers with Widows.
1896–1900 ..	28.38	26.63	44.73	26.35	34.12	41.74	49.72
1901–05 ..	28.52	26.90	45.08	26.62	34.09	42.28	49.88
1906–10 ..	28.76	27.19	45.71	26.93	34.70	42.95	50.64
1911–15 ..	29.01	27.49	46.62	27.18	35.73	43.80	51.37
1916–20 ..	29.77	27.92	46.84	27.42	34.78	44.42	50.25
1921–25 ..	29.18	27.47	47.37	27.08	35.73	44.67	51.87
1911 ..	29.03	27.46	46.42	27.19	35.19	43.49	51.46
1912 ..	29.12	27.56	46.77	27.27	35.75	43.96	51.67
1913 ..	29.11	27.56	46.65	27.25	35.68	43.91	51.35
1914 ..	28.94	27.40	46.66	27.05	35.90	43.79	51.39
1915 ..	28.87	27.49	46.61	27.12	36.15	43.86	50.98
1916 ..	29.70	27.93	47.32	27.47	36.20	44.79	51.07
1917 ..	30.04	28.04	47.71	27.52	35.63	45.22	51.23
1918 ..	30.08	28.14	47.74	27.59	35.43	45.38	50.88
1919 ..	29.81	27.99	45.72	27.46	33.36	43.40	48.85
1920 ..	29.20	27.51	45.73	27.04	33.28	43.31	49.24
1921 ..	29.19	27.48	46.60	27.03	34.35	44.06	50.57
1922 ..	29.21	27.54	46.91	27.12	35.24	44.31	51.20
1923 ..	29.15	27.46	47.34	27.09	35.64	44.60	51.98
1924 ..	29.16	27.45	47.72	27.08	36.31	44.95	52.39
1925 ..	29.17	27.42	48.29	27.07	37.13	45.43	53.19
1926 ..	29.14	27.39	48.53	27.04	37.58	45.75	53.47

Females.

Year.	All Brides.	All Spinster Brides.	All Widow Brides.	Spinsters with Bachelors.	Spinsters with Widowers.	Widows with Bachelors.	Widows with Widowers.
1896–1900 ..	26.21	25.14	40.70	24.62	32.64	35.96	44.99
1901–05 ..	26.36	25.37	40.37	24.88	32.99	35.76	45.09
1906–10 ..	26.59	25.63	41.06	25.14	33.63	36.51	45.82
1911–15 ..	26.77	25.75	41.65	25.27	34.23	37.40	46.57
1916–20 ..	27.14	25.81	38.66	25.24	34.30	34.73	44.74
1921–25 ..	26.69	25.57	40.83	25.00	34.79	36.43	46.48
1911 ..	26.80	25.81	41.74	25.32	34.13	37.01	46.63
1912 ..	26.84	25.85	41.89	25.36	34.25	37.44	46.69
1913 ..	26.80	25.78	41.57	25.29	34.23	37.22	46.59
1914 ..	26.68	25.61	41.64	25.12	34.28	37.53	46.57
1915 ..	26.75	25.71	41.42	25.28	34.28	37.78	46.39
1916 ..	27.17	25.91	40.73	25.36	34.58	36.79	45.85
1917 ..	27.27	25.89	39.66	25.28	34.54	35.40	45.48
1918 ..	27.29	25.92	38.84	25.33	34.59	34.82	44.86
1919 ..	27.16	25.81	36.69	25.24	33.77	33.07	43.36
1920 ..	26.79	25.54	37.36	24.99	34.02	33.56	44.14
1921 ..	26.73	25.52	38.83	24.95	34.40	34.83	45.26
1922 ..	26.71	25.57	39.93	25.02	34.53	35.81	45.87
1923 ..	26.66	25.57	40.94	25.01	34.74	36.35	46.66
1924 ..	26.67	25.59	41.69	25.02	34.95	37.19	46.89
1925 ..	26.66	25.59	42.74	25.00	35.34	37.95	47.70
1926 ..	26.63	25.56	43.11	24.97	35.44	38.42	47.90

Table LXXXI.—England and Wales : Marriages of Bachelors, Spinsters, Widowers and Widows at Various Ages per 1,000 Marriages at All Ages, 1886–1926.

Period.	All Ages.	Under 18 Years.	18–	19–	20–	Under 21 Years.	21–	25–	30–	35–	40–	45–	50–	55 and up.	Age not stated.
<i>Bachelors.</i>															
1886–90..	1,000	0	4	20	47	71	424	309	96	33	13	6	3	2	43
1891–95..	1,000	0	3	17	43	63	415	333	108	37	14	6	3	2	19
1896–1900	1,000	0	3	15	39	57	411	346	110	39	15	6	3	2	11
1901–05..	1,000	0	3	13	35	51	390	360	122	41	16	7	3	2	8
1906–10..	1,000	0	3	11	30	44	370	372	132	46	17	8	3	2	6
1911–15..	1,000	0	3	12	28	43	350	373	139	53	21	9	4	3	5
1916–20..	1,000	1	6	13	27	47	332	354	144	62	30	15	6	4	6
1921–25..	1,000	1	4	13	30	48	355	360	133	53	24	12	5	5	5
1921 ..	1,000	1	4	15	33	53	350	356	136	55	24	12	5	4	5
1922 ..	1,000	1	4	14	30	49	349	361	136	54	24	12	5	5	5
1923 ..	1,000	1	4	13	29	47	358	359	133	53	24	12	5	4	5
1924 ..	1,000	1	4	13	27	45	361	361	132	51	23	11	6	5	5
1925 ..	1,000	0	4	12	28	44	360	367	129	50	23	11	6	5	5
1926 ..	1,000	1	4	13	29	47	357	372	125	49	22	12	6	5	5
<i>Spinsters.</i>															
1886–90..	1,000	9	37	72	97	215	417	219	62	23	10	5	2	1	46
1891–95..	1,000	7	31	66	94	198	425	241	70	25	11	5	2	1	22
1896–1900	1,000	6	27	59	89	181	434	253	74	26	11	5	2	1	13
1901–05..	1,000	5	23	53	82	163	428	272	79	28	12	5	2	1	10
1906–10..	1,000	5	21	48	75	149	420	284	87	30	12	6	2	2	8
1911–15..	1,000	6	23	47	70	146	402	292	94	34	14	7	3	2	6
1916–20..	1,000	6	23	48	72	149	402	275	94	39	17	9	4	3	8
1921–25..	1,000	7	25	51	72	155	411	280	87	32	14	8	4	3	6
1921 ..	1,000	7	27	54	76	164	406	274	86	33	15	8	4	3	7
1922 ..	1,000	7	26	51	73	157	404	282	88	33	15	8	3	3	7
1923 ..	1,000	7	25	49	72	153	412	279	87	33	14	8	4	3	7
1924 ..	1,000	7	25	49	70	151	414	281	87	32	14	8	4	3	6
1925 ..	1,000	8	25	49	70	152	413	281	86	32	14	8	4	4	6
1926 ..	1,000	9	28	50	70	157	410	279	86	32	14	8	4	4	6

Period.	All Ages.	Under 21 Years.	21–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70 and up.	Age not stated.
<i>Widowers.</i>														
1886–90..	1,000	0	13	81	133	151	139	120	94	70	53	27	15	104
1891–95..	1,000	0	12	76	132	153	148	126	106	74	55	29	18	71
1896–1900	1,000	0	10	73	131	158	150	136	109	84	56	30	19	44
1901–05..	1,000	0	10	68	130	155	152	136	116	83	62	32	20	36
1906–10..	1,000	0	8	61	123	153	152	141	119	90	62	37	24	30
1911–15..	1,000	0	7	53	109	151	150	146	125	97	68	41	30	23
1916–20..	1,000	0	7	54	105	138	151	155	130	101	70	39	26	24
1921–25..	1,000	0	8	55	109	137	135	136	126	104	79	51	36	24
1921 ..	1,000	0	8	61	116	142	143	138	120	99	73	46	31	23
1922 ..	1,000	0	8	55	115	142	138	139	121	102	74	48	34	24
1923 ..	1,000	0	8	55	110	140	133	136	124	102	80	51	37	24
1924 ..	1,000	0	7	54	107	129	134	135	132	104	82	52	40	24
1925 ..	1,000	0	8	50	98	128	127	132	133	113	87	58	41	25
1926 ..	1,000	0	6	48	96	123	131	136	131	112	88	59	44	26
<i>Widows.</i>														
1886–90..	1,000	1	30	119	164	173	145	117	73	46	26	10	3	93
1891–95..	1,000	1	27	115	170	177	157	119	78	47	29	10	4	66
1896–1900	1,000	1	26	113	175	188	157	127	81	50	28	11	3	40
1901–05..	1,000	1	28	122	182	190	158	118	78	47	29	11	4	32
1906–10..	1,000	1	23	106	177	192	160	129	82	52	30	14	6	28
1911–15..	1,000	1	21	98	167	193	171	135	85	51	32	16	11	19
1916–20..	1,000	3	67	189	191	162	126	98	64	41	24	13	6	16
1921–25..	1,000	1	25	134	200	182	138	109	77	52	33	19	11	19
1921 ..	1,000	1	37	179	222	178	122	93	62	42	25	15	8	16
1922 ..	1,000	1	25	148	212	185	135	102	72	49	29	16	8	18
1923 ..	1,000	1	23	125	200	182	140	113	79	53	34	19	12	19
1924 ..	1,000	1	20	104	188	185	150	123	83	56	37	20	14	19
1925 ..	1,000	1	17	89	170	180	152	126	98	65	44	24	13	21
1926 ..	1,000	1	16	84	158	189	153	127	97	66	45	26	17	21

Marriages of Minors.—Of the males married during the year, 12,104, or 4·33 per cent., were under the age of 21, and of the females 41,277, or 14·75 per cent., as compared with 4·06 per cent., and 14·23 per cent. last year respectively. Females, who have always greatly outnumbered the males in this class—in the present year the ratio is about $3\frac{1}{2}$ to 1—naturally show the highest rates and the greatest changes in the rate; they formed 18·8 per 1,000 of the unmarried females aged 15–21 in 1911, were 26·6 in 1920, and are now 19·7, while the corresponding rates for males were 5·5, 8·8 and 5·6 per 1,000 respectively; both the rapid post-war rise and the subsequent heavy decline in the rate generally follows the experience of adults, but while the adult marriage-rate is appreciably lower than it was in 1925, in the case of minors, only the female rate shows a small decline, while the male rate has remained stationary.

Comparative figures are shown in Table LXXXIII for the period back to 1901, before which the age group 15–21 was not identified in the population returns; an indication of the trend of youthful marriage-rates in earlier periods may be gained from the general age analyses in Table LXXXI.

Table LXXXII.—England and Wales: Minors Married per 1,000 Marriages at all Ages, 1876–1926.

Year.	Husbands.	Wives.	Year.	Husbands.	Wives.
1876–80 ..	77·8	217·0	1915 ..	34·8	129·8
1881–85 ..	73·0	215·0	1916 ..	36·2	129·1
1886–90 ..	63·2	200·2	1917 ..	41·7	134·2
1891–95 ..	56·2	182·6	1918 ..	42·6	129·0
1896–1900..	51·2	168·0	1919 ..	43·7	129·4
1901–05 ..	46·3	153·1	1920 ..	46·8	142·9
1906–10 ..	40·3	139·4	1921 ..	48·2	149·2
1911–15 ..	39·2	136·6	1922 ..	44·4	144·4
1916–20 ..	42·6	133·3	1923 ..	42·5	142·9
1921–25 ..	43·3	143·9	1924 ..	40·4	140·3
1912 ..	39·2	135·4	1925 ..	40·6	142·3
1913 ..	42·1	143·8	1926 ..	43·3	147·5
1914 ..	41·6	142·5			

Table LXXXIII.—England and Wales : Annual Marriage-rate per 1,000 Unmarried and Widowed Persons in the age group 15–21 at each period 1901 to 1926.

Year.	Males.		Females.	
	Rate.	Ratio to 1921.	Rate.	Ratio to 1921.
1901	6·7	87	21·6	92
1911	5·5	71	18·8	80
1920	8·8	114	26·6	114
1921	7·7	100	23·4	100
1922	6·4	83	20·9	89
1923	5·9	77	20·0	85
1924	5·6	73	19·8	85
1925	5·6	73	20·0	85
1926	5·6	73	19·7	84

The numbers of males and females marrying under age and at six other groups of ages with distinction of the marital conditions of the parties involved are shown for each registration county in Table N of Part II. By comparison of these figures and those of the subjoined tables LXXVII and LXXXIV with the corresponding figures for last year it will be found that early marriages in common with those of adults have been influenced by the events of the year. There has been a marked decline in the Welsh section and a rather smaller loss in the North, but these have been largely compensated by increases recorded for both the Midlands and the Southern area. For males the rate is still at a maximum in the North and is lowest in Wales; Welsh females on the other hand occupy the highest position in the table and are thus in direct contrast to the male experience. For the two sexes combined the 1926 rates are highest in the counties of Huntingdon, Nottingham, Cambridge, Durham, Yorkshire and Lincoln and are lowest in North-West Wales and in Westmorland, Hereford, Rutland and Gloucester.

Table LXXXIV.—Marriage-rate of Minors per 1,000 Marriageable Population aged 15–21 in Geographical Sections of the Country, 1921 and 1926.

	Males.				Females.			
	Rate per 1,000 Marriageable Population 15–21.		Ratio of local rate to England and Wales rate.		Rate per 1,000 Marriageable Population 15–21.		Ratio of local rate to England and Wales rate.	
	1921.	1926.	1921.	1926.	1921.	1926.	1921.	1926.
England and Wales.	7·7	5·6	1,000	1,000	23·4	19·7	1,000	1,000
North	9·3	6·2	1,208	1,092	26·1	20·1	1,115	1,018
Midlands ..	7·5	5·8	974	1,023	22·1	19·3	944	979
South (including London)	6·1	5·2	792	926	20·8	19·5	889	991
Wales	6·7	4·2	870	754	26·7	20·5	1,141	1,039
London ..	7·8	6·3	1,013	1,110	22·2	19·0	949	961

Buildings in which Marriages may be Solemnized.—At the end of the year 1926 the numbers of churches or chapels of the Established Church and of the Church in Wales and of registered buildings in which marriages could be legally solemnized, were as follows :—

Established Church and Church in	
Wales	16,295
All other religious denominations ..	19,100
Total	35,395

The increase upon the numbers at the end of the previous year was :—Established Church and Church in Wales 20, other

religious denominations 252. The number of these buildings belonging to the various denominations is shown for each registration county in Table Q.

By the Acts 15 and 16 Vict. c. 36, and 18 and 19 Vict. c. 81, it was enacted that all places of religious worship not being churches or chapels of the Established Church, should, if the congregations desired, be certified to the Registrar-General, certification for public worship being a necessary preliminary to the registration of a building for the solemnization of marriages.

The number of places of meeting for religious worship on the official register on 31st December, 1926, and the number of buildings registered for the solemnization of marriages are shown in Table LXXXV.

Table LXXXV.

Denomination.	Buildings certified to the Registrar- General as meeting- places for Religious Worship.	Buildings registered for the Solemnization of Marriages.*
Roman Catholics	1,681	1,579
Wesleyan Methodists	7,621	4,600
Congregationalists	3,384	3,120
Baptists	3,205	2,894
Primitive Methodists	4,279	2,130
United Methodist Church	1,966	1,312
Calvinistic Methodists	1,341	1,056
Presbyterians	444	445
Unitarians	182	197
New Church	56	59
Catholic Apostolic Church	62	48
Countess of Huntingdon's Connexion	45	40
Salvation Army	1,224	251
Society of Friends	410	†
Jews	256	†
Other Denominations	3,523	1,369
All Denominations	29,679	19,100

* Of these buildings nearly 1,000 were certified before 1852, as Places of Meeting for Religious Worship to some other Authority than the Registrar-General and therefore are not included in the preceding column.

† It is not necessary for buildings to be registered for the solemnization of Quaker or Jewish marriages. Under section 31 of the Births, Deaths, and Marriages Registration Act (1836) Registering Officers of the Society of Friends and Secretaries of Jewish Synagogues who have been certified to the Registrar-General record the marriages in each case.

The Marriage Act, 1898, provided that under specified conditions marriages might be solemnized in registered buildings in the presence of duly authorised persons without the attendance of a Registrar of Marriages. The governing bodies of some of the registered buildings have availed themselves of this provision, and at the end of the year 1926, the number of such buildings which had been brought under the operation of the Act, and so remained, was 5,607 out of the total of 19,100. The numbers of

these buildings, and the denominations to which they belonged, were as follows :—

- 2,325 Wesleyan Methodists.
 - 813 Congregationalists.
 - 887 Primitive Methodists.
 - 571 Baptists.
 - 488 United Methodist Church.
 - 140 Calvinistic Methodists.
 - 383 Other Denominations and Unsectarian.
-
- 5,607 All Denominations.
-

Divorces and Remarriages of Divorced Persons.—The annual numbers of marriages dissolved or annulled are shown in Table O of Part II and again in the table below in terms of the persons involved, for each of the past ten years and the preceding quinquennia back to 1876–80.

During the year 1926, 2,554 divorces and 68 annulments were obtained, the number of persons involved being twice these figures, or a total of 2,622 of each sex. The total is larger but not significantly different from last year's figure ; it is, however, less than three-quarters of the record figure of 3,522, involving 7,044 persons, established in 1921 as the result of a greatly stimulated increase in divorce proceedings which followed the termination of the war.

Table LXXXVI.—England and Wales : Annual Number of Persons Divorced, and of Divorced Persons who Remarried, 1876–1926.

Period.	Number of Persons Divorced.	Annual Number of Divorced Persons who remarried.							
		Total.	Men.	Women.	Divorced men marrying spinsters.	Divorced men marrying widows.	Divorced men and women inter-marrying.	Divorced women marrying bachelors.	Divorced women marrying widowers.
1876–80 ..	554	104	56	48	42	12	4	31	15
1881–85 ..	671	128	68	60	53	12	6	42	15
1886–90 ..	707	169	80	89	65	11	8	65	20
1891–95 ..	744	214	110	104	89	15	12	75	23
1896–1900 ..	980	345	172	173	138	24	20	126	37
1901–05 ..	1,126	509	262	247	205	38	38	181	47
1906–10 ..	1,247	693	356	337	276	53	54	253	57
1911–15 ..	1,312	820	411	409	330	50	62	309	69
1916–20 ..	3,115	1,264	683	581	525	127	62	439	111
1921–25 ..	5,467	3,050	1,708	1,342	1,316	295	194	976	269
1917.. ..	1,956	791	429	362	350	62	34	268	77
1918.. ..	2,222	885	495	390	390	81	48	288	78
1919.. ..	3,308	1,352	708	644	538	142	56	510	106
1920.. ..	6,180	2,370	1,314	1,056	981	272	122	795	200
1921.. ..	7,044	2,878	1,592	1,286	1,182	330	160	939	267
1922.. ..	5,176	3,374	1,913	1,461	1,457	360	192	1,062	308
1923.. ..	5,334	3,008	1,679	1,329	1,307	279	186	1,002	234
1924.. ..	4,572	2,903	1,627	1,276	1,267	275	170	931	260
1925.. ..	5,210	3,088	1,729	1,359	1,367	229	266	944	282
1926.. ..	5,244	3,124	1,710	1,414	1,325	231	308	995	265

From Table LXXXVI it will be seen that the number of females who on remarriage described themselves as divorced has also increased, but that among males a slight fall is recorded. The table brings out the contrast between the pre-war and post-war position, both in regard to the absolute numbers of divorced

persons remarrying and also in regard to the proportions of the sexes involved, for whereas formerly the numbers of males and females remarrying were about equal, there is now considerable male excess. But it must be borne in mind that these numbers may understate the facts, owing to misdescription of status in the registers.

In Table P are given certain particulars concerning the marriages in respect of which suits for dissolution or annulment were commenced during the year.

It will be seen from this Table that of the 3,367 suits commenced in the current year the most frequent duration of marriage at the date of commencement of the proceedings is from 5-10 years with an average of 238 for each of those years of duration, but the maximum is not of particular significance, for this period only accounts for 35 per cent. of the cases, there being 14 per cent. of shorter duration, while in 51 per cent. the marriages have subsisted for 10 years or more. More than 40 per cent. of the marriages in question were childless, and in a further 32 per cent. there was one child only.

BIRTHS.

The births registered during 1926 numbered 694,563 corresponding to a birth-rate of 17·8 per 1,000 of the population living.

The number of births is 16,019 less than those of 1925, a diminution of 2·3 per cent., while the rate for the year is, as was that of last year in its turn, the lowest on record, with the exception of the worst of the war years, viz., 1918, during which it was unusually depressed.

The present fall is rather less than that reported last year and as it has shown a diminishing tendency in recent years, the inference to be drawn from the gradually flattening birth-rate curve was that further falls were likely to be smaller still and that the rate was approaching a minimum of the order of 17 per thousand which might be reached within a year or two and beyond which the position might remain stationary or even improve. The continuity of the series has, however, been disturbed by a much greater decline in 1927 taking the rate well below the 17 per thousand mark; the intensity of this further fall shown by the 1927 births has no doubt been occasioned by the same cause as was responsible for much of the decline in the marriages of 1926, viz., the prolonged coal dispute of that year, and its effect may therefore be of a temporary nature only. The irregularity produced in the sequence of successive years rates, however, makes the discernment of future tendencies the more difficult and it may be that the births in the near future, will prove to be fewer than otherwise would have appeared probable from the pre-1926 position.

The birth-rate in this country attained its highest values during the period 1865-1880, when it exceeded 35 per 1,000 population, and from that time it diminished by gradual and practically continuous stages to 23·8 in 1914; it is now 17·8

per 1,000, less than half the maximum figure of 36·3 recorded in 1876, and having regard to current economic and industrial conditions appears likely for some time to remain low in relation to all earlier periods for which we have reliable records.

The recent history of the birth-rate in this country may be compared with those of a number of other countries of which particulars are at hand by reference to Table LXXXVII. The record extends over the period from 1911 to 1926 (for earlier years, *see* the Registrar-General's Annual Report for 1910) and covers therefore not only the years of the war period itself when the movements were quite abnormal, but a number of both earlier and later years sufficient to indicate the more prolonged changes which may probably be associated with the events of that period.

Following the comparatively uneventful period prior to the war, during which the slight declining tendency shown by the birth-rates of most countries was but a normal extension of the prolonged decline of several earlier decades, the rates from 1915 onwards, both of belligerents and neutrals, became subject to great disturbance. Within three years births in Austria, Belgium, France, Germany and Hungary had dropped to one half or less than half of their original numbers, while in Italy where the commencement of the fall was rather later, the decline in the rate from 30·5 in 1915 to 18·1 per 1,000 population in 1918 was almost as phenomenal. England and Wales ranks decidedly lower as regards the violence of the fall during those years while in respect of countries outside Europe and amongst neutral European countries, the movement though significantly downward was more irregular in character. With the cessation of hostilities there was a sudden rebound in all the rates taking them to new maxima which were attained in the year 1920 (except in Austria where the peak occurs two years later) and were immediately followed by a fresh reaction in the shape of a new decline which, sharp at first, has in most countries continued with occasional interruption down to the present time.

In all the countries listed in the table except France and Japan, the current rates show a large fall in comparison with pre-war experiences. For Germany, the average for the three years 1924-26, viz., 20·2 per 1,000 compares with 28·1 per 1,000 in 1911-13, a drop of 28 per cent.; in Hungary the fall is one of 21·5 per cent. from 34·9 to 27·4 per 1,000; Italy 12·8 per cent. from 31·9 to 27·8 per 1,000. In England and Wales where the comparable rates are 24·2 and 18·3 per 1,000 the fall of 24·4 per cent. is even more serious since the position of the country in relation to that of others was already a low one; only Ireland, Belgium, France, Sweden and Switzerland occupying inferior positions, while to-day it is lower than that of any other country except Sweden. The case of France is exceptional in that it is the only country in which the current birth-rate shows an improvement over the pre-war rate, so that instead of being outstandingly the worst in the list as formerly, it now ranks in this respect above Switzerland, England and Wales and Sweden.

Table LXXXVII.—British and Foreign Birth Rates (living born) per 1,000 total population.

Year.	England and Wales.	Scotland.	Northern Ireland.	Irish Free State.	Austria.	Belgium.	Czecho Slovakia.	Denmark.	Finland.	France.	Germany.	Hungary.	Italy.	Year.
1911 ..	24.4	25.6	23.3	23.3	*31.4	22.9	—	26.7	29.1	*18.7	*28.6	*34.7	*31.5	1911
1912 ..	24.0	25.9	23.0	23.0	*31.3	22.6	—	26.6	29.1	*18.9	*28.3	*35.8	*32.4	1912
1913 ..	24.1	25.5	22.8	22.8	*29.7	22.4	—	25.6	26.9	*17.9	*27.5	*34.3	*31.1	1913
1914 ..	23.8	26.1	22.6	22.6	23.3	20.4	—	25.6	25.4	*11.6	*26.8	*34.5	*30.5	1914
1915 ..	21.8	23.9	22.0	22.0	18.4	16.1	—	24.2	25.4	—	*20.4	*23.6	—	1915
1916 ..	21.0	22.9	21.0	21.0	14.7	12.9	—	24.4	24.1	*9.5	*15.2	*16.8	*24.0	1916
1917 ..	17.8	20.3	19.8	19.8	13.9	11.3	—	23.7	24.3	*10.5	*13.9	*16.0	*19.5	1917
1918 ..	17.7	20.5	20.0	20.0	14.1	11.3	—	24.1	23.8	*12.2	*14.3	*15.3	*18.1	1918
1919 ..	18.5	21.7	20.0	20.0	18.0	16.3	22.4	22.6	19.2	*12.6	20.0	28.9	*21.4	1919
1920 ..	25.5	28.1	22.2	22.2	22.4	22.1	26.6	25.4	25.3	21.3	25.9	32.4	*31.8	1920
1921 ..	22.4	25.2	20.2	20.2	22.9	21.8	29.0	24.0	24.3	20.7	25.3	31.6	*30.3	1921
1922 ..	20.4	23.5	23.3	19.5	23.2	20.4	28.1	22.2	23.4	19.3	22.9	30.6	30.2	1922
1923 ..	19.7	22.8	23.9	20.5	22.5	20.4	27.3	22.3	23.7	19.1	21.0	29.0	29.4	1923
1924 ..	18.8	21.9	22.7	21.1	21.7	19.9	25.8	21.8	22.4	18.7	20.5	26.8	28.4	1924
1925 ..	18.3	21.3	22.0	20.8	—	19.8	25.1	21.0	22.3	18.9	20.7	28.2	27.8	1925
1926 ..	17.8	20.9	22.5	20.6	—	—	24.6	—	21.7	18.8	19.5	27.2	27.2	1926

Year.	Netherlands	Norway.	Portugal.	Roumania.	Spain.	Sweden.	Switzerland	Australia.	Canada.	New Zealand.	South Africa (Whites.)	U.S.A. (Registration Area).	Japan.	Year.
1911 ..	27.9	25.7	—	*42.3	31.4	24.0	24.2	27.2	—	26.0	32.2	—	33.8	1911
1912 ..	28.1	25.4	—	*43.4	31.6	23.8	24.2	28.6	—	26.5	32.2	—	33.1	1912
1913 ..	28.3	25.1	31.9	*42.1	30.4	23.2	23.2	28.2	—	26.1	31.7	—	32.9	1913
1914 ..	28.3	25.1	—	*42.8	29.8	22.9	22.4	27.9	—	26.0	30.2	—	33.4	1914
1915 ..	26.3	23.6	—	*40.5	30.8	21.6	19.5	27.1	—	25.3	29.3	25.1	32.8	1915
1916 ..	26.6	24.2	31.0	—	28.9	21.2	18.9	26.6	—	25.9	29.3	25.0	32.4	1916
1917 ..	26.2	25.1	30.3	—	28.8	20.9	18.5	26.3	—	25.7	28.5	24.7	32.2	1917
1918 ..	25.0	24.6	28.6	—	29.1	20.3	18.7	25.0	—	23.4	28.6	24.6	31.6	1918
1919 ..	24.4	22.7	26.0	—	28.3	19.8	18.6	23.5	—	21.4	26.9	22.3	31.1	1919
1920 ..	28.3	26.1	33.6	33.2	30.0	23.6	20.9	25.5	26.6	25.1	29.0	23.7	35.0	1920
1921 ..	27.4	24.0	30.3	38.2	30.4	21.5	20.8	25.0	26.4	23.3	28.4	24.3	33.9	1921
1922 ..	25.9	23.1	—	37.2	30.5	19.6	19.6	24.7	25.2	23.2	27.5	22.5	33.1	1922
1923 ..	26.0	22.5	—	36.4	30.6	18.8	19.4	23.8	23.9	21.9	26.7	22.4	33.9	1923
1924 ..	25.1	21.1	—	36.7	29.9	18.1	18.8	23.2	23.7	21.6	26.3	22.6	32.7	1924
1925 ..	24.2	20.0	—	35.2	29.3	17.5	18.4	22.9	23.0	21.2	26.5	21.4	33.6	1925
1926 ..	23.8	19.7	—	—	—	16.9	18.2	22.0	—	21.1	26.2	—	—	1926

* Pre-war area.

The crude birth-rate, or ratio of births to population of all ages, is a convenient form of statement when the object in view is to record the aggregate effect of all the various factors governing reproduction. It sums up the effects of all the influences governing the rate at which the community is reproducing itself and is, therefore, in conjunction with the corresponding form of mortality statement, the crude death-rate, the appropriate means of measuring natural increase. The number of births in the country, however, depends mainly upon the number of married women at the reproductive ages, and as they form less than one-eighth of the total population the variation of their numbers and ages over a period of time may be different from that of the whole population, in which case the crude birth-rates form but an imperfect measure of the changes in fertility, *i.e.*, of the rate of reproduction in proportion to the opportunity of reproduction. In the absence of any knowledge of the constitution of the general population the crude rate is often used as an index of fertility, but always on the implied assumption of a fixed proportion of potential mothers, an assumption which may only reasonably be made in respect of short periods of adjacent years.

In order to exclude the effect of varying population constitution and so obtain a truer statement of fertility change, the method of standardization, described in the 1922 Review and adopted in connection with the statistics of the years 1922-1925, has been continued to cover the experience of 1926. It consists in (1) adopting the fertility curve or fertility ratios experienced in 1921 as a standard, (2) applying them age by age to the appropriate women in the population in question—for the years subsequent to 1921 estimates of such women have been made for the purpose—and so obtaining a standard number of births, the numbers which would have occurred had the standard birth-rates been operating, and (3) calculating the ratio of the actual births recorded to the standard or expected number; the ratio of actual to expected is thus an index, comparing in an integral form the actual experience of each period or year with a common standard and, therefore, with one another.

Standardized comparisons are given in the last column of Table LXXXVIII. both for census years prior to 1921 and for individual years of the present inter-censal period and the results are contrasted in that table with the more familiar and more approximate comparisons given by the cruder birth-rates, whether calculated per 1,000 total population or per 1,000 married women between ages 15 and 45. Thus, in 1871, 1,504 legitimate births were recorded for every 1,000 that would have occurred under the standard fertility rates, the 1921 experience being in the aggregate only two-thirds of that of 50 years ago. From that time the rates diminished steadily and progressively as shown by the comparative figures, which are 1,481, 1,382, 1,250, and

1,102 at successive ten-year intervals between 1881 and 1911. Since 1921 the even more rapid drop, commented upon in dealing with the crude rates, is shown by the further reductions in the index which is shown for 1926 as 783, rather more than three-fourths of the 1921 standard. It will be observed that over the earlier years shown in the table the decrease in fertility was overstated by the crude rates, and that since 1911 the tendency has been in the other direction.

Table LXXXVIII.—England and Wales.—Birth-rates and Fertility, 1871–1926.

Legitimate Births.	Births per 1,000 Total Population.	Ratio to 1921.	Births per 1,000 Married Women, 15-45.	Ratio to 1921.	Ratio of Actual Births to those which would have occurred had the Standard age rates been operating.
1871 (1870-72) ..	33.3	1,556	292.5	1,659	1,504
1881 (1880-82) ..	32.3	1,509	286.0	1,622	1,481
1891 (1890-92) ..	29.4	1,374	263.8	1,496	1,382
1901 (1900-02) ..	27.5	1,285	235.5	1,336	1,250
1911 (1910-12) ..	23.4	1,093	197.4	1,120	1,102
1921	21.4	1,000	178.8	1,000	1,000
1922	19.5	911	160.7	912	909
1923	18.9	883	155.3	881	877
1924	18.1	846	148.4	842	835
1925	17.5	818	143.5	814	805
1926	17.0	794	139.8	793	783
Illegitimate Births.	Births per 1,000 Total Population.	Ratio to 1921.	Births per 1,000 Unmarried Women, 15-45.	Ratio to 1921.	Ratio of Actual Births to those which would have occurred had the Standard age rates been operating.
1871 (1870-72) ..	1.96	1,922	17.0	2,152	2,051
1881 (1880-82) ..	1.65	1,618	14.1	1,785	1,688
1891 (1890-92) ..	1.31	1,284	10.5	1,329	1,247
1901 (1900-02) ..	1.12	1,098	8.5	1,076	1,008
1911 (1910-12) ..	1.03	1,010	7.9	1,000	968
1921	1.02	1,000	7.9	1,000	1,000
1922	0.89	873	7.0	886	937
1923	0.82	804	6.5	823	863
1924	0.78	765	6.2	785	826
1925	0.74	725	5.9	747	790
1926	0.76	745	6.0	759	810
All Births.	Births per 1,000 Total Population.	Ratio to 1921.	—	—	Ratio of Actual Births to those which would have occurred had the Standard age rates been operating.
1871 (1870-72) ..	35.3	1,576	—	—	1,527
1881 (1880-82) ..	34.0	1,518	—	—	1,490
1891 (1890-92) ..	30.7	1,371	—	—	1,376
1901 (1900-02) ..	28.6	1,277	—	—	1,238
1911 (1910-12) ..	24.4	1,089	—	—	1,095
1921	22.4	1,000	—	—	1,000
1922	20.4	911	—	—	910
1923	19.7	879	—	—	876
1924	18.8	839	—	—	834
1925	18.3	817	—	—	804
1926	17.8	795	—	—	784

Illegitimate Births.—The births registered during 1926 include 29,591 of illegitimate children, an increase of 695 on the number in 1925, coincident with the decrease of 16,019 in total births. Illegitimate births have thus increased by 2·4 per cent., while legitimate births have decreased by 2·5 per cent. As a result of these changes, the proportion of illegitimate to total births has risen slightly from 4·07 per cent. last year to 4·26 per cent., figures which compare with the minimum of 3·95 per cent. recorded for the period 1901–1905 and the maximum of 6·26 per cent. attained in 1918.

In addition to the crude rate comparison an attempt has been made in Table LXXXVIII to allow for the age incidence of the potential mothers in respect of illegitimate as well as legitimate births. The standard age factors employed are, as described in the 1922 Review, of less authority than those in respect of legitimate fertility, and serve mainly to complete the tables on the lines followed and already described for married women.

Birth-rates of Different Parts of the Country.—The birth-rates, total and illegitimate, of individual administrative areas tabulated in Table E are summarized in Table LXXXIX.

The method employed in earlier paragraphs for comparing the fertility of England and Wales in different years by the use of a standard fertility curve applies equally well of course to the comparison of fertility in different sections of the population of which the sex, age and marital condition constitution is known, and the crude rate comparisons are supplemented in this table by the addition of a series of figures in which variations in birth-rates due solely to differences in the age and marital condition proportions of the several populations have been, as far as possible, eliminated.

The first three columns of Table LXXXIX show for each of the specified divisions of the country the crude birth-rate of 1921, the ratio of the crude rate to that of the country as a whole, and the corresponding ratio obtained by the use of the standard fertility rates in conjunction with the census populations of that year. For later years local populations analysed by age and marital condition are not available, and an approximate correction to the crude rate comparison of 1926 shown in col. 5 has been made as follows :—The difference between cols. 2 and 3 has been regarded as a measure of the variation due to the constitution of the population and in the form of a factor, viz., col. 3 ÷ col. 2, has been applied to the crude 1926 birth ratio to obtain the corrected ratio shown in col. 6. The implied assumption that the constitutions of the local populations remain in constant relation to one another could not be maintained over a long period of time, but for the years of an inter-censal period corrected ratios obtained in this way will probably provide a truer picture of the incidence of fertility than that shown by the unadjusted crude rates.

Table LXXXIX.—England and Wales and Sections* of the Country.—Birth-rates, 1921 and 1926.

	1921.			1926.		
	Birth-rate per 1,000 Total Population.	Ratio to Rate for England and Wales. (Crude Rates.)	Ratio of Actual Births to those which would have occurred had the Standard age rates been operating.	Birth-rate per 1,000 Total Population.	Ratio to Rate for England and Wales. (Crude Rates.)	Ratio Corrected to Exclude Variations due to Differing Age and Marital Condition Incidence.†
	(1)	(2)	(3)	(4)	(5)	(6)
<i>All Births—</i>						
England and Wales	22·4	1,000	1,000	17·8	1,000	1,000
London	22·1	987	957	17·1	961	932
County Boroughs	23·5	1,049	1,004	18·7	1,051	1,006
Other Urban Districts	22·1	987	978	17·2	966	957
Rural Districts	21·4	955	1,060	17·7	994	1,103
Northern Counties	23·7	1,058	1,025	18·8	1,056	1,023
County Boroughs	24·0	1,071	1,026	19·1	1,073	1,028
Other Urban Districts	23·1	1,031	996	18·0	1,011	977
Rural Districts	23·7	1,058	1,099	19·6	1,101	1,144
Midland Counties	22·2	991	999	17·7	994	1,003
County Boroughs	23·6	1,054	1,000	18·6	1,045	991
Other Urban Districts	21·6	964	964	17·1	961	961
Rural Districts	21·2	946	1,054	17·6	989	1,102
Southern Counties (including London).	20·4	911	941	16·3	916	946
County Boroughs	19·8	884	887	16·3	916	919
Other Urban Districts	18·9	844	898	15·2	854	909
Rural Districts	19·1	853	994	15·8	888	1,035
Wales	25·0	1,116	1,099	19·3	1,084	1,067
County Boroughs	24·9	1,112	1,035	19·7	1,107	1,030
Other Urban Districts	26·7	1,192	1,101	19·5	1,096	1,012
Rural Districts	22·6	1,009	1,143	18·7	1,051	1,191
<i>Illegitimate Births—</i>						
England and Wales	1·02	1,000	1,000	0·76	1,000	1,000
London	0·89	873	788	0·76	1,000	903
County Boroughs	1·09	1,069	1,034	0·78	1,026	992
Other Urban Districts	0·96	941	944	0·70	921	924
Rural Districts	1·07	1,049	1,197	0·82	1,079	1,231
Northern Counties	1·12	1,098	1,091	0·80	1,053	1,046
County Boroughs	1·15	1,127	1,091	0·84	1,105	1,070
Other Urban Districts	1·04	1,020	1,030	0·73	961	970
Rural Districts	1·17	1,147	1,257	0·87	1,145	1,255
Midland Counties	1·00	980	992	0·72	947	959
County Boroughs	1·04	1,020	975	0·69	908	868
Other Urban Districts	0·91	892	869	0·68	895	872
Rural Districts	1·07	1,049	1,234	0·82	1,079	1,269
Southern Counties (including London).	0·92	902	877	0·74	974	947
County Boroughs	1·04	1,020	1,030	0·84	1,105	1,116
Other Urban Districts	0·91	892	864	0·68	895	867
Rural Districts	0·92	902	1,029	0·72	947	1,080
Wales	1·03	1,010	1,108	0·75	987	1,083
County Boroughs	0·77	755	751	0·61	803	799
Other Urban Districts	1·02	1,000	1,134	0·69	908	1,030
Rural Districts	1·22	1,196	1,320	0·94	1,297	1,365

* For constitution of Geographical Sections of the Country see page 7.

† Col. (6) has been obtained by multiplying col. (5) by the correcting factor referred to in the text, viz., col. 3 ÷ col. 2.

For 1926 the diminution in births has been common throughout all of the areas and sections shown in the table; the fall during the past year has been greatest in Wales, where the rate was

highest, and in London, where it was already below the average. Otherwise, the variations have hardly affected the differences between the several geographical divisions, and have not disturbed their order ; this has been maintained with great constancy year after year, as shown in the following table, which states the birth-rate of each section as a percentage of that of the whole country for each of the past ten years.

Table XC.—Birth-rate of Different Sections of the Country per cent. of that of England and Wales, 1917–26.

—	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.
North ..	104	106	105	103	106	104	104	106	105	106
Midlands..	98	98	97	100	99	100	99	99	99	99
South ..	94	90	93	96	91	94	94	92	92	92
Wales ..	115	122	112	105	112	107	110	112	110	108

These percentages are based upon the crude rates and reflect therefore not only differences of fertility but also the varying incidence of sex, age, and marital condition in the populations from which they arise. When the latter is eliminated as is attempted in column 6 of Table LXXXIX, the differences between the sections are narrowed, the standardized percentage ratios now becoming 102·3, 100·3, 94·6, and 106·7 for the North, Midlands, South, and Wales respectively. If the areas be examined from the point of view of urbanization the change from the crude to the standardized comparison is even more notable. By the crude rates the births in rural districts are below normal, whereas from the point of view of fertility alone they are shown to be the most productive of all areas, not only for the country as a whole, but for each of the four geographical sections. Similarly in the urban districts of the South, which yield the lowest rate shown in the table, part of the lowness is due to the unfavourable constitution of the population for the ratio to the England and Wales rate is raised from 85·4 per cent. to 90·9 per cent. upon standardization. On the other hand the towns of Wales and in a lesser degree the towns of the North, the county boroughs of the Midlands and London are overfavoured by a comparison limited to the crude ratios alone. Amongst the towns in each of the geographical sections the births of 1926 were relatively more frequent in the more populous areas.

The extent of illegitimacy in different classes of area and parts of the country may be gathered from the lower half of Table LXXXIX. The distribution is much the same as that of all births, though the fluctuations are considerably wider throughout ; the highest rates occur in the rural districts, except in the South, when it is slightly exceeded in the county boroughs,

but whereas for all births the rural aggregate rate is 10·3 per cent. above the mean, for illegitimate only it is 23·1 per cent. above. The table confirms generally the view expressed in earlier reports, when only crude rate comparisons were available, that such rates understated the position in rural districts and overstated it in the South. The slight increase in the illegitimate births this year has occurred mainly in the large towns of the South.

Sex Proportions at Birth.—Births of males in England and Wales in 1926 numbered 354,217, and those of females 340,346; the proportion of male to female births was 1,041, 1,033, and 1,041 to 1,000 for legitimate, illegitimate, and total births respectively. The corresponding proportions for total births in each year from 1887 onwards and in groups of years since the commencement of registration are shown in Table C (Part II); the extreme range during the preceding 50 years was from 1,032 per 1,000 in 1898 to 1,060 in 1919. During this period the highest ratio recorded prior to the war was 1,042 in 1878. From 1919 the male excess has fallen almost continuously to the present time, the current ratio of 1,041 approaching that of the years immediately preceding the war.

The extent to which different classes of area or portions of the country contribute to the preponderance of male births is shown in Table XCI.

Table XCI.—Male Births per 1,000 Female Births, 1926.

	England and Wales.	North.	Midlands.	South.	Wales.
All Areas	1,041	1,041	1,048	1,034	1,033
London	—	—	—	1,032	—
County Boroughs ..	1,043	1,047	1,037	1,050	1,026
Other Urban Districts	1,040	1,040	1,043	1,042	1,027
Rural Districts ..	1,043	1,019	1,070	1,020	1,048

There is much variability in the relative incidence of masculinity, and the above figures for 1926 afford no reliable guide to the ascertainment of any characteristic differences.

NATURAL INCREASE.

In 1926 the excess of births over deaths registered in England and Wales was 240,759, as compared with 237,741 in 1925, 256,698 in 1924, and 313,346 in 1923.

Table XCII.—England and Wales. Natural Increase of Population per 1,000 living, 1876-1926.

	Mean Annual Birth-rate per 1,000 living.	Mean Annual Death-rate per 1,000 living.	Mean Annual Rate of Increase by excess of Births over Deaths per 1,000 living.
1876—1880.. ..	35·3	20·8	14·5
1881—1885.. ..	33·5	19·4	14·1
1886—1890.. ..	31·4	18·9	12·5
1891—1895.. ..	30·5	18·7	11·8
1896—1900.. ..	29·3	17·7	11·6
1901—1905.. ..	28·2	16·0	12·2
1906—1910.. ..	26·3	14·7	11·6
1911—1915.. ..	23·6	14·3*	9·3
1916—1920.. ..	20·1	14·4*	5·7
1921—1925.. ..	19·9	12·2	7·7
1907..	26·5	15·1	11·4
1908..	26·7	14·8	11·9
1909..	25·8	14·6	11·2
1910..	25·1	13·5	11·6
1911..	24·4	14·6	9·8
1912..	24·0	13·4	10·6
1913..	24·1	13·8	10·3
1914..	23·8	14·0	9·8
1915..	21·8	15·7*	6·1
1916..	21·0	14·3*	6·7
1917..	17·8	14·2*	3·6
1918..	17·7	17·3*	0·4
1919..	18·5	14·0*	4·5
1920..	25·5	12·4*	13·1
1921..	22·4	12·1	10·3
1922..	20·4	12·8	7·6
1923..	19·7	11·6	8·1
1924..	18·8	12·2	6·6
1925..	18·3	12·2	6·1
1926..	17·8	11·6	6·2

*For the years 1915 to 1920 inclusive the figures upon which these rates are based relate to civilians only.

From the comparable series of rates per 1,000 living population given in Table XCII it will be observed that, though there is rather greater irregularity in the successive rates of natural increase, they have, over the whole range of years there given, followed on the whole a similar course to those followed by both birth and death rates, and have declined with advancing years. The present rate of natural increase, viz., rather more than 6 per 1,000 population, is lower than that of any earlier recorded periods (outside the war years), and compares with a figure of approximately 10 per 1,000 in the years immediately preceding the war and over

14 per 1,000 in the period 1876–1880 when the birth-rate was at about its maximum. Stated in these terms the curve of natural increase expresses no more than that the crude birth-rate has hitherto been greater than the crude death-rate and that the decline in the former has advanced at a greater rate than the fall in the latter. From the general continuity of the series it may be inferred that, even if the fall in the birth-rate continues, the number of births will continue to exceed the deaths for a number of years to come, and that apart from the results of migration, the population will continue to increase, though, naturally, at a somewhat slower pace.

What may not be inferred from mere numbers of births or deaths or from their alternative expressions as rates per 1,000 total population is that the perpetuation of current conditions regarding fertility and mortality would be sufficient to ensure a continuous increase in the national population, both now and in the remote future. Nor would it be possible to relate the opposing forces of growth and decay without an elaborate analysis of all the complex factors contributing thereto, an analysis which would probably involve reference to the life table or other artificial statistical standards remote from conditions ever likely to be experienced in actual fact. On the other hand, the unprecedented lowness of the current birth-rate has undoubtedly occasioned much vexed comment; it is lower now than any previously recorded rate in this country (with the special exception of the worst war years), and it is at the same time lower than that of almost every other country for which returns are at hand. It does seem worth considering, therefore, whether it is possible to provide a simple test which, without recourse to abstruse hypotheses, will exhibit, however approximately, its sufficiency or otherwise in relation to some definite and easily understood standard.

A possible standard which suggests itself is indicated in the following question :

“ If the fertility of 1926 were maintained unaltered in the future, would the infants born in 1926 themselves in their turn reproduce offspring numerically equal to themselves ? ”

The question may be briefly examined as follows. First of all to obtain an expression of the fertility of 1926 sufficiently satisfactorily for the purpose, it is necessary to relate the 1926 births to the ages of their respective mothers. This cannot be done directly, as the mother's age is not recorded on the birth certificate, but with the aid of the legitimate and illegitimate fertility curves adopted in connexion with the standardization of the crude birth-rates (*see* the Births Section of this Report) the following estimated relationships may, in the absence of more authoritative and precise data, be considered.

Age.	Estimated No. of females at reproductive ages in 1926. (thousands).	Estimated Distribution of 1926 births according to age of mother. (thousands).	Total fertility rate at each age period (legitimate and illegitimate combined).
15-20 ..	1,795	18.3	.0102
20-25 ..	1,737	158.0	.0910
25-30 ..	1,656	210.3	.1270
30-35 ..	1,575	169.4	.1076
35-40 ..	1,477	112.0	.0758
40-45 ..	1,426	26.6	.0186
	9,666	694.6	

Both the distributions of columns 1 and 2 and the related fertility rates of column 3 are approximations only. From the latter it will be observed that one of every 100 females aged 15-20 is assumed to have borne a child in 1926, that the proportion rose rapidly to 1 in 11 for the age group 20-25, 1 in 8 at ages 25-30, and thereafter declined, reaching negligible dimensions after attainment of age 45. The curve formed by these successive proportions is adopted as representing the 1926 fertility experience and fulfils the essential condition that, when applied to the population exposed to risk (column 1), it reproduces in the aggregate the total births registered in 1926, viz., 694,600.

Of the said total births, 354.2 thousand were males and 340.4 thousand were females, the latter of which, or, rather, their survivors, are to be regarded as the potential mothers of the future to whom, under the conditions of the problem, the birth-rate curve of the table is to be applied. By 15, the age at which fertility is here assumed to commence, the 340.4 thousand females born in 1926 will have been reduced by mortality—the mortality-rates of the current period are assumed for this purpose—to approximately 308 thousand, and these in turn will further diminish with advancing age to a number in the region of 277 thousand at age 45, the assumed termination of the reproductive period. Applying then the birth-rate factors to the survivors as they pass through the successive age periods between 15 and 45, the following table shows that over the whole of their reproductive period, births to the number of approximately 635,000 would be produced, a number which is about $91\frac{1}{2}$ per cent. of the births of 1926 upon whom the test has been made.

Survivors of 340.4 thousand female births.		Female Group population. Aged. (thousands).		Assumed Birth Rate.	Births (thousands).
At age 15 ..	308.2	15-20	1,532	.0102	15.6
20 ..	304.7	20-25	1,512	.0910	137.6
25 ..	300.2	25-30	1,489	.1270	189.1
30 ..	295.5	30-35	1,465	.1076	157.6
35 ..	290.4	35-40	1,437	.0758	108.9
40 ..	284.4	40-45	1,404	.0186	26.1
45 ..	277.3				
					634.9

That is to say, that every 1,000 children born in 1926 would, at the rate they themselves were born, produce eventually 915 children, or, in other words, that the present birth-rate is only $91\frac{1}{2}$ per cent. of what it should be if continuity in reproduction is to be maintained at a constant level. Alternatively it may be inferred that the crude birth-rate (in relation to the general population of to-day) corresponding to a 100 per cent. standard of reproduction would be about 19·5 per thousand as compared with 17·8 per 1,000, the rate actually recorded for 1926.

It is not proposed to discuss here the modifications which might be caused by possible changes in other population factors, mortality, migration, marriage, etc., nor is it the function of this report to consider whether the future position as inferred from current events is, from a national point of view, a desirable one or otherwise. It is sufficient at this juncture to point out that the constitution of the future population depends overwhelmingly on the numbers born and that any practicable improvement in mortality can do little more than delay for a while a decline due to an insufficiency of births. And that, even allowing for the possible error which must attend an analysis based upon imperfect data, it seems extremely probable that since about 1923 the birth rate in this country has entered upon a stage which, if no future improvement takes place, must eventually result in a declining population. On the other hand, if, as is quite possible, the present lowness of the birth-rate is only a temporary phenomenon reflecting the prolonged economic depression of the post-war period, the tendency may be corrected before the consequential decline actually sets in, while even in the most extreme circumstances it could hardly commence for some decades to come.

Table XCIII, shows for 1926 the rate of natural increase in various sections of the country, representing the combined effect of the several sectional birth and death-rates.

Table XCIII.—Natural Increase per 1,000 living, 1926.

—	England and Wales.	North.	Midlands.	South.	Wales.
All Areas	6·2	6·5	6·6	4·7	7·9
London	—	—	—	5·5	—
County Boroughs ..	6·4	6·2	7·1	3·9	8·7
Other Urban Districts	6·0	6·0	6·6	3·8	8·5
Rural Districts ..	6·4	8·5	6·3	4·6	6·6

UNITED KINGDOM AND IRISH FREE STATE.

Population.—The first complete census of the United Kingdom was taken in 1821, when the population numbered 20,893,584 persons; during the 100 years 1821–1921 this number has increased by about 126 per cent., the sum of the final census

figures for Great Britain and of the estimated population of Ireland in June, 1921, amounting to 47,263,196. The populations of the several portions of the United Kingdom for each census year from 1821 and for individual years from 1887 are set out in Table A of Part II.

Table XCIV.—United Kingdom and Irish Free State. Vital Statistics 1916–1925 and 1926.

—			United Kingdom and Irish Free State.	England and Wales.	Scotland.	Northern Ireland.	Irish Free State.
<i>Estimated Population in the middle of the year 1926 (in thousands).</i>							
Males	23,164	18,698	2,354	607	1,505		
Females	25,023	20,369	2,542	647	1,465		
Persons	48,188	39,067	4,897	1,254	2,970		
<i>Marriages.</i>							
1926	331,911	279,860	31,253	7,228	13,570		
Persons married per 1,000 living :—							
1916–1925 ..	15·6	16·2	14·9	13·0	10·0		
1926	13·8	14·3	12·8	11·5	9·1		
<i>Births.</i>							
1926	886,350	694,563	102,449	28,162	61,176		
Per 1,000 living :—							
1916–1925 ..	20·4	20·0	22·9	22·8	20·4		
1926	18·4	17·8	20·9	22·5	20·6		
<i>Deaths.</i>							
1926	578,151	453,804	63,780	18,827	41,740		
Per 1,000 living :—							
1916–1925 ..	13·8	13·3*	14·4	16·8	15·6		
1926	12·0	11·6	13·0	15·0	14·1		
<i>Deaths of Infants under 1 year.</i>							
1926	64,213	48,757	8,514	2,390	4,552		
Per 1,000 births :—							
1916–1925 ..	84	83	96	89	76		
1926	72	70	83	85	74		

*For the years 1916–1920 inclusive the figures on which this rate is based relate to civilians only.

Marriages.—The marriages during the year 1926 numbered 331,911, corresponding to a rate of 13·8 persons married per 1,000 of the total population. This rate was 0·8 below the corresponding rate in 1925, and 1·8 per 1,000 below the average rate in the ten years 1916–1925.

Births.—The births registered in the year 1926 numbered 886,350, and were in the proportion of 18·4 per 1,000 of the total population. This rate was 0·4 per 1,000 below the corresponding rate in 1925, and 2·0 per 1,000 below the average in the ten years 1916–1925.

Deaths.—The deaths registered in the year 1926 numbered 578,151, and were in the proportion of 12·0 per 1,000 of the total population. This rate was 0·5 per 1,000 below the corresponding rate in 1925, and 1·8 per 1,000 below the average in the ten years 1916–1925.

Infant Mortality.—The deaths of infants under one year of age during the year 1926 numbered 64,213 and were equivalent to a rate of 72 per 1,000 registered births against 77 in 1925 and an average rate of 84 in the ten years 1916–1925.

BIRTHS AND DEATHS AT SEA.

Marine Register Book.—In accordance with the Births and Deaths Registration Act of 1874 and the Merchant Shipping Act of 1894, Commanding Officers of ships trading to or from British ports are required to transmit returns of all births and deaths occurring on board their ships to the Registrar-General of Shipping and Seamen, who furnishes certified copies of such returns to the Registrars-General of Births and Deaths for England, Scotland, Northern Ireland and the Irish Free State. Similar returns are furnished to the Registrars-General of Births and Deaths by Officers in charge of His Majesty's ships. These returns of births and deaths at sea constitute the "Marine Register Book." During the year 1926 this register was increased by the addition of 162 entries of birth and 2,062 entries of death.

REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES.

Progress of Registration.—The names in the alphabetical indexes of births, deaths and marriages recorded in the national registers of England and Wales were increased during the year 1926 by 1,708,087, this addition raising the total of names in the indexes, which at the end of 1926 embraced a period of 89½ years, to 150,929,054 (Table S).

Searches and Certificates.—Besides the certified copies of the registered births, deaths and marriages kept in England and Wales pursuant to the Registration Acts, a large number of other registers and records are deposited in this Office under statute or other arrangement. A revised list of these various registers and records will be found on pages 149–155 of the Review for 1925. Searches may be made in any of these registers, and certificates obtained on payment of the prescribed fees.

Table XCV.

Years.	Total Searches.	Gratuitous Searches.	Searches paid for by Fees.	Certificates Issued.	Amount Received.		
					£	s.	d.
1866 (52 weeks)	12,135	—	12,135	10,017	1,860	15	6
1875 (52 weeks)	26,356	—	26,356	20,282	3,879	15	6
1885 (52 weeks)	36,450	—	36,450	27,682	5,317	13	6
1895 (52 weeks)	53,289	—	53,289	35,727	7,200	12	6
1905 (52 weeks)	65,142	—	65,142	50,310	9,611	9	0
1906 (52 weeks)	64,340	—	64,340	49,429	9,458	6	0
1907 (52 weeks)	69,249	—	69,249	53,058	10,194	9	0
1908 (53 weeks)	72,370	—	72,370	54,870	10,550	8	0
1909 (52 weeks)	132,169	58,626*	73,543	54,674	10,568	8	0
1910 (52 weeks)	126,716	51,347	75,369	57,019	10,939	5	6
1911 (52 weeks)	140,496	65,491	75,005	56,347	10,875	6	0
1912 (52 weeks)	149,752	69,151	80,601	61,143	11,752	6	0
1913 (52 weeks)	150,540	71,225†	79,315	60,356	11,613	19	0
1914 (53 weeks)	188,040	104,593	83,447	65,817	12,482	11	6
1915 (52 weeks)	202,939	118,788	84,151	69,746	13,007	10	0
1916 (52 weeks)	303,334	197,669	105,665	88,265	16,379	17	0
1917 (52 weeks)	272,199	177,403	94,796	80,374	14,859	14	0
1918 (52 weeks)	255,462	146,504	108,958	90,898	16,889	0	0
1919 (52 weeks)	301,913	170,670	131,243	107,067	20,017	14	6
1920 (53 weeks)	284,194	149,447	134,747	108,684	20,415	0	0
1921 (52 weeks)	258,461	131,167	127,294	99,911	18,949	10	6
1922 (52 weeks)	263,047	143,088	119,959	90,400	19,028	12	6
1923 (52 weeks)	269,822	144,118	125,704	93,701	20,875	16	0
1924 (52 weeks)	337,521	178,990	158,531	121,890	27,109	15	0
1925 (53 weeks)	488,781	339,790	148,991	115,378	25,610	2	6
1926 (52 weeks)	541,916	407,687	134,229	105,560	23,305	6	6

* Including some searches made in 1908.

† In addition, there were 91,917 gratuitous searches made for National Insurance Audit purposes.

Table XCV, affords an indication of the extent to which the copies of the records kept in this Office have been utilized by the public for legal evidence of births, deaths and marriages since 1866.

The 407,687 gratuitous searches during 1926 comprise 220,807 searches made in the Birth Records for the purpose of verifying the ages of persons claiming old-age pensions, 17,019 searches in the Census Records of 1861 etc. for the same purpose, 62,891 made to assist dependents of men of H.M. Forces to produce evidence of marriage and of the births of children in connexion with claims to Naval and Military Pensions, Separation Allowances, etc., and to verify the ages of certain classes of youths and men in connexion with service in the Army, Navy, and Air Force, 98,659 for verification purposes in connexion with claims to Widows' and Orphans' Pensions under the Widows', Orphans' and Old Age Contributory Pensions Act, 1925, and 8,311 for other public purposes.

Offences against the Registration Acts.—In 1926 nine persons, on prosecution by order of the Registrar-General, were convicted of offences in connexion with registration. The offences for which convictions were obtained were as under :—

(a) Giving false information when registering a birth or death	7
(b) For using as true a falsified Certificate of birth or death	2

In addition to the above cases proceedings were taken and convictions obtained by the Director of Public Prosecutions in cases reported through the Registrar-General, the offences being those of false registration and making false declarations when giving notice of marriage.

PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS.

In Tables T and U of Part II of the Statistical Review, 1926, are shown the numbers of males and females on the Register of Electors compiled under the Representation of the People Act, 1918, in respect of the qualifying period of six months* ending on the 15th June, 1926.

The particulars have been taken from statements furnished to the Registrar-General by the Registration Officers of the several areas, or in the case of a University forming the whole or part of a University constituency, by the Chancellor, Registrar or other officer dealing with Parliamentary registration.

The expressions "Parliamentary electors," "Local Government electors," and "persons on absent voters list," have in the tables the same meaning as in the Act. The expression "men registered for business premises qualification," means men who are qualified to be registered as occupiers of business premises and are not resident in the qualifying premises.

The Registration Officers were instructed to enter in the statements from which the Return has been compiled the total number of names on the Register without any deduction in respect of persons who are registered in more than one Parliamentary or Local Government constituency, and further, to take care to secure that the names of "out voters" (that is, persons whose names appear twice in the Register, by reason of a claim under Rule 24 of the First Schedule to the 1918 Act) should be counted once only.

Table T refers to Parliamentary electors, and shows for each Parliamentary constituency in England and Wales, including the University constituencies, the number of males and females on the Register, and also the numbers registered in respect of business premises qualifications and the numbers on the absent voters list.

* The 6 months qualifying period in the Representation of the People Act, 1918, has now been reduced to 3 months by the Economy (Miscellaneous Provisions) Act, 1926, with effect from 1927 inclusive.

Table U refers to Local Government electors, and shows the numbers of each sex registered in respect of every sanitary area, i.e., County Borough, Metropolitan Borough, Municipal Borough, Urban District and Rural District in England and Wales.

The totals of the Autumn 1926 Registers are shown in the following summary in conjunction with the figures of previous Autumn Registers made since the passing of the 1918 Act.

England and Wales.

Register	Parliamentary Register (including University Constituencies).					Local Government Register.		
	Persons.	Males.	Females.	Men registered for business premises qualifica- tion (included in Cols. <i>b and c</i>).	Persons on Absent Voters List (included in Cols. <i>b-d</i>).	Persons.	Males.	Females.
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>
Autumn								
1918	17,222,983	10,281,054	6,941,929	159,013	3,362,028	13,930,130	6,998,665	6,931,465
1919	17,465,638	10,234,887	7,230,751	205,461	1,157,061	14,361,123	7,176,019	7,185,104
1920	17,584,552	10,176,750	7,407,802	203,471	254,866	14,712,453	7,364,912	7,347,541
1921	17,795,784	10,237,344	7,558,440	194,737	185,227	15,019,348	7,527,861	7,491,487
1922	18,001,692	10,312,248	7,689,444	199,904	162,901	15,322,625	7,700,108	7,622,517
1923	18,388,833	10,498,179	7,890,654	208,694	151,953	15,691,962	7,873,461	7,818,501
1924	18,806,842	10,719,922	8,086,920	211,257	165,564	16,015,033	8,007,384	8,007,649
1925	19,167,275	10,897,545	8,269,730	217,509	167,406	16,345,290	8,157,607	8,187,683
1926	19,346,954	10,982,128	8,364,826	206,199	161,460	16,574,549	8,284,181	8,290,368

It will be observed that the female electorate on the Parliamentary Register and both male and female on the Local Government Register have steadily increased with the increase in population since the passing of the 1918 Act. The male Parliamentary electorate has increased since 1920, but prior to that year decreases were shown, due, as explained at greater length in the 1921 report, to a special provision of the 1918 Act under which members of the fighting forces were exceptionally placed upon the register at the age of 19 instead of the normal age of 21. The consequence of this was that in the two years after demobilisation, the normal number of new entrants was diminished by the earlier registrations at a younger age and the residue was less than the lapses by death, etc.

Including a certain amount of plural representation in the case of those persons registered in more than one constituency by reason of their possessing the necessary residence or business qualification, or being entitled to be registered in respect of a University constituency, the total Parliamentary electorate of 19,346,954 represents 49·5 per cent. of the estimated total population, or 58·7 per cent. of the male and 41·1 per cent. of the female population; in the case of the rather more restricted Local Government franchise, the numbers are somewhat less and the proportions correspondingly lower, the total electorate being 42·4 per cent. of the whole population, or 44·3 per cent., and 40·7 per cent. in the case of males and females separately.

Of the total of the Parliamentary Registers, the bulk, viz., 19,291,397, represents the aggregate voting strength in the 509 geographical constituencies into which England and Wales is divided, the balance of 55,557 representing the five University constituencies. Eleven of the Boroughs, and three University constituencies, however, each return two members, so that the total representation in Parliament is by 528 members, 520 in respect of the geographical divisions, with an average electorate of 37,099 per member and eight in respect of the Universities, with an average electorate of 6,945.

MISCELLANEOUS.

Other tables appearing in Part II. of the Statistical Review which have not formed the subject of special comment in the foregoing pages are as follows :—

Table R, showing the balance inward or outward of passenger movement into and out of the United Kingdom for each of the years from 1907–1926.

Table W, showing the Area, Population, Births and Deaths in British Islands other than Great Britain and Ireland from 1902–1926

Table X, showing the Population, Births, Deaths, Infant Mortality, Marriages and corresponding rates for the year 1926 in the several portions of the British Dominions :—

The Commonwealth of Australia.

Canada.

New Zealand.

South Africa.

Table Y, showing the 1921 Census Populations, and the intercensal rate of increase or decrease of the several Dominions, Colonies and Protectorates (including mandated territories) in the British Empire.

Table Z, showing the latest Census Populations and intercensal rates of increase or decrease in various Foreign Countries.

Table AA, showing the changes which have taken place in the boundaries of Administrative and Poor Law Areas in England and Wales during 1926.

Table BB, showing the changes which have taken place in the boundaries of Administrative Areas in England and Wales during 1926, with enumerated population by sex and age (1921) of the transferred areas.

METEOROLOGY OF THE YEAR, 1926.

A mild and rather dull Year.

The year 1926 was a mild and rather dull year with rainfall above the average. The most noteworthy events in the weather of the year were an abnormally wet November, followed by an exceptionally dry December. March was also notably dry.

January was very wet and mild except for about a week of cold weather commencing on the 13th during which snow fell widely and unusually low screen minima and severe ground frosts were recorded in many districts. Sunshine amounts were generally deficient, notably in the midland and eastern counties. Floods occurred widely during the first week. *February* was unsettled, dull and decidedly mild except for a short spell from about the 10th to the 13th of easterly winds and cold weather with snow in some eastern and northern districts. *March* was on the whole fair and mild and exceptionally dry. Westerly gales occurred widely between the 3rd and 6th and from the 9th to 11th. Temporary falls of temperature took place on the 4th and during a spell of easterly winds between the 16th and 26th. Ground frost occurred frequently during the second and third weeks. *April* on the whole was mild and dull, wet in the midland, eastern and southern counties of England and dry in most of the northern counties, and in Wales where little rain fell during the first half of the month. Unusually high temperatures occurred during the first week, maximum temperatures of 70° F. and above being recorded at several stations especially in the central and eastern districts of England. *May* was on the whole cool and changeable with considerable bright and showery periods, frequent thunderstorms and hail showers and a brief spell of warm weather extending from about the 21st to the 26th. *June* was mainly dull and wet, notably in the eastern and southern counties, during the greater part of the first three weeks. An improvement took place about the 18th and except for a short period of dry and cool northerly winds between the 22nd and 26th, mainly fine warm weather was experienced generally during the remainder of the month. *July* was mainly fair, dry and warm, with occasional thunderstorms during the first half of the month, and unsettled but with many fine periods during the second half. During a short spell of hot weather about the 12th maximum temperatures of 80° F. and over were recorded in most districts and the nights were unusually warm. The month's rainfall was slightly below normal over central and eastern England, and above normal over northern and western England and over Wales. *August* was on the whole fine and warm and relatively dry, rainfall totals in excess of the normal being largely accounted for in many cases by heavy falls associated with thunderstorms. *September* was warm and dry, notably in the southern districts. A notable feature of the weather of the month was the brief hot spell

culminating on the 19th when day temperatures exceeded 85° F. in several places. The first ten days or so of October were unsettled and exceptionally mild while the last two weeks were unusually cold with frequent and severe ground frosts. Rainfall totals were below the average in most districts notably in the southern districts. *November* was exceptionally wet with frequent high winds and gales; over England and Wales, regarded as a whole, it was the wettest November since 1870. Numerous stations reported the heaviest November rainfall on record. Sunshine totals were markedly below normal in eastern and south-eastern districts. In striking contrast to November, *December* was a month of abnormal dryness, associated mainly with anticyclonic conditions, moderate temperature and sunshine totals generally in excess of the normal. In several districts, it was the driest December on record, *e.g.*, at Rothamsted since 1864 and at Richmond (Surrey) since the commencement of rainfall records in 1866.

Meteorological Office,

Air Ministry,

South Kensington, S.W.7.

Further information.—Tables relating to meteorological elements are given in Part I (Tables 29–31). A description of the weather of each month appears in the Quarterly Return of the Registrar-General and a summary of the observations at Greenwich for each month of the year appears in Table XIV of the Return for the fourth quarter.

Charts showing the distribution of pressure, temperature, sunshine and rainfall for the year, together with summaries of the observations at numerous stations will be found in the Annual Summary of the Monthly Weather Report issued by the Meteorological Office.

A list of the publications of the Meteorological Office will be found in "List M" issued by H.M. Stationery Office.

